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Saskatchewan Exploration and Development Highlights 2003

M. Gunning, G. Tourigny, L. Kelley and S. Harvey
Saskatchewan Industry and Resources

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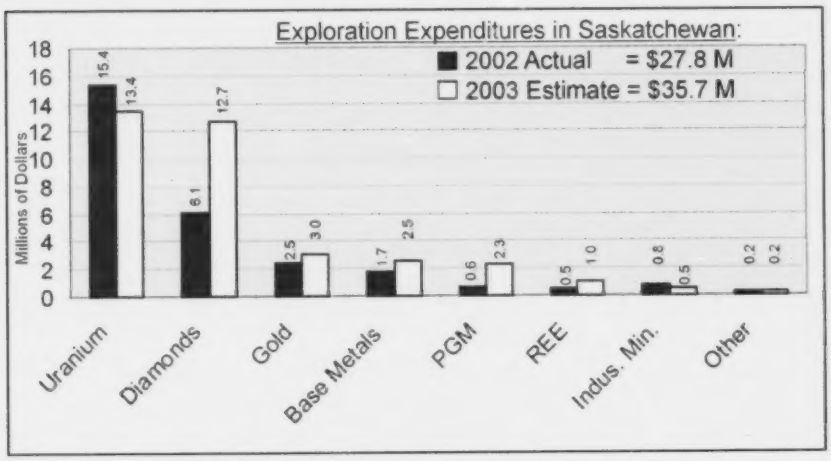
1.0 EXECUTIVE SUMMARY

Surface mineral exploration was robust in Saskatchewan in 2003. Uranium, diamonds and gold were the primary focus. Total annual expenditures are estimated to be $35.7 M, up about 29% from the actual total annual expenditures in 2002 of $27.78 M (Figure 1). For mineral production in 2003, Saskatchewan continued to provide about one third of the world's supply of uranium and potash.

The Athabasca Basin continues to be the world's premier exploration district for high grade uranium deposits. Although exploration budgets in 2003 decreased slightly from the previous year, a steady rise in the spot market price of uranium during the past 30 months bodes well for future activity. Global uranium industry leaders Cameco Corporation and COGEMA Resources Inc. are the most active, but more than a dozen companies are active. Programs span reconnaissance work utilizing sophisticated geophysical methods to target deeply buried deposits, regional target testing and follow-up target delineation by diamond drilling, and aggressive mine-area exploration.



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003 e
Uranium	9.69	8.07	7.25	11.06	12.54	16.76	27.32	20.4	14	17.74	14.02	15.43	13.41
Diamonds	2.67	4.19	3.99	10.14	3.76	5.72	2.2	1.01	1.43	4.11	4.77	6.06	12.71
Gold	5.03	5.5	2.17	3.67	8.38	7.42	3.5	2.76	0.95	0.73	1.01	2.46	3.02
Base Metals	5.65	3.8	4.15	4.18	3.96	5.2	10.11	3.68	5.64	4.47	1.39	1.73	2.53
PGM[1]	—	—	—	—	—	—	—	—	0.91	1.02	0.14	0.59	2.28
REE[2] & Other	0	0.25	0.55	0.1	—	0.32	0.15	0.21	0.81	0.14	1.58	1.51	1.77
Total	23.04	21.81	18.11	29.15	28.64	35.42	43.38	30.06	23.74	28.21	22.91	27.78	35.72

1 Platinum Group Elements

2 Rare Earth Elements and Tantalum

Figure 1: Mineral exploration expenditures in Saskatchewan. Data in histogram compare actual expenditures for 2002 with estimates for 2003 which are compiled from the annual survey of exploration expenditures by the Saskatchewan Geological Survey. Tabulated data from 1991 to 2002 are actual values reported in the same survey. All values in millions of Canadian dollars.

Diamond exploration in the Fort à la Corne District located northeast of Prince Albert in central Saskatchewan was robust in 2003. On October 1, more than 50 companies and individuals held a total of 648,000 ha. Total expenditures are forecast at $12.7 M, up significantly from the actual total expenditure in 2002 of $6.0 M (Figure 1). The Fort à la Corn Joint Venture completed a major diamond drill program on numerous kimberlites to follow-up results announced for 2000-2001 and 2002 bulk sample programs, Shore Gold began shaft sinking for its underground bulk sampling program on the Star Kimberlite, and the first kimberlite discovery in the district since 1996 was made on the East Side Diamond Property by Forest Gate Resources.

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Overall, the advancement of capital-intensive diamond evaluation projects reflects a positive long-term view for the exploration potential of the district.

Gold exploration expenditures are forecast to exceed $3 M, up about 25% compared to last year, and four times higher than in 2000. Work is being done by junior exploration companies, and *small-cap* mining companies. Aggressive exploration around its Seabee Mine by Claude Resources was successful and will be continued in 2004. In the La Ronge Gold Belt, work by Golden Band Resources spanned reconnaissance geochemistry to winter drilling of established targets, mostly on a large and consolidated land holding centered on the Jolu Mill complex. Select high grade intersections will be followed up in 2004, and economic models are being developed to evaluate the central processing of high grade ore from numerous satellite bodies.

Exploration levels for base metals remained low in 2003. Persistent evaluation of targets in the Flin Flon Domain, and its southern extension under Paleozoic cover continued by Hudson Bay Exploration and Development Corporation. Leader Mining is arranging financing to re-evaluate and further explore the nearly 20 mt Knife Lake copper-zinc deposit to the northwest of Flin Flon in the Glennie Domain. Sediment-hosted copper showings around Janice Lake in the Wollaston Domain were staked by Phelps Dodge Canada in 2002 and explored in 2003; work included prospecting, ground-based geophysics and geochemistry, and diamond drilling.

Development of select rare earth and rare metal prospects in northern-most Saskatchewan continued in 2003. Great Western Minerals obtained additional material to continue metallurgical testing of the extensive, and open JAK zone at its Hoidas Lake Property.

2.0 INTRODUCTION

This paper is a review of current activity only. *Geology, and Mineral and Petroleum Resources of Saskatchewan* (Saskatchewan Geological Survey, in press) provides a more comprehensive summary of the Economic Geology of the province, including historical reserve and production data. Web sources for up-to-date information on all Saskatchewan mineral occurrences are the Saskatchewan Geological Atlas (Slimmon, 2002) and the Saskatchewan Mineral Deposits Index (Bennett, 2002), both available at the Saskatchewan Industry and Resources web site (http//www.ir.gov.sk.ca).

A variety of grade, tonnage, reserve and resource data are reported herein. Current exploration expenditure forecasts are compiled from the annual survey of exploration expenditures by the Saskatchewan Geological Survey. Actual annual expenditures for previous years are from the same survey and are published annually in *Saskatchewan Exploration and Development Highlights*. Grade, tonnage, reserve and resource numbers reported herein are from a variety of public sources, including published reports, public records, corporate websites and Saskatchewan Mining Association *Facts Sheets*. They do not necessarily conform to current CIM standards and National Instrument 43-101 of the Canadian Securities Commission. The department of Industry and Resources and the Government of Saskatchewan do not accept liability for any errors, omissions or inaccuracies that may be included in, or derived from, this report.

Tables 1, 2 and 4 contain data on the current mineable reserves and geologic resources for the major uranium, gold and base metal deposits in the province respectively. Inside the back page is a table of current properties available for option. The back page is a full-size colour map with the locations of all of the major deposits discussed herein. The map also shows the outline of the tectonic provinces and lithostructural domains of the Precambrian Shield in northern Saskatchewan.

3.0 The Energy and Minerals Sector

Energy and mineral resources are a cornerstone of the provincial economy. The non-renewable resources, including petroleum, coal, metallic and industrial minerals, are the most important primary industrial sector. They accounted for 12.8% of the provincial GDP in 2002 compared to about 5.7% for agriculture (Figure 2), and just under 40% of the gross value of provincial exports in 2001. Saskatchewan is the second-ranking province in oil production, and third-ranking province in both gas and coal, and the third-ranking province in gross, non-fuel mineral production. Industrial and metallic minerals were valued at $2.46 B in 2002, and they generated more than $250 M in direct crown revenues (Figure 2). Metallic mineral production in 2003 included uranium, gold, copper, zinc, and silver. Industrial mineral production includes potash, aggregate, salt and sodium sulfate, and minor bentonite and structural clay.

The mines of the Athabasca Basin in northern Saskatchewan, and those of the Prairie Evaporite in central Saskatchewan, continue to be the world's

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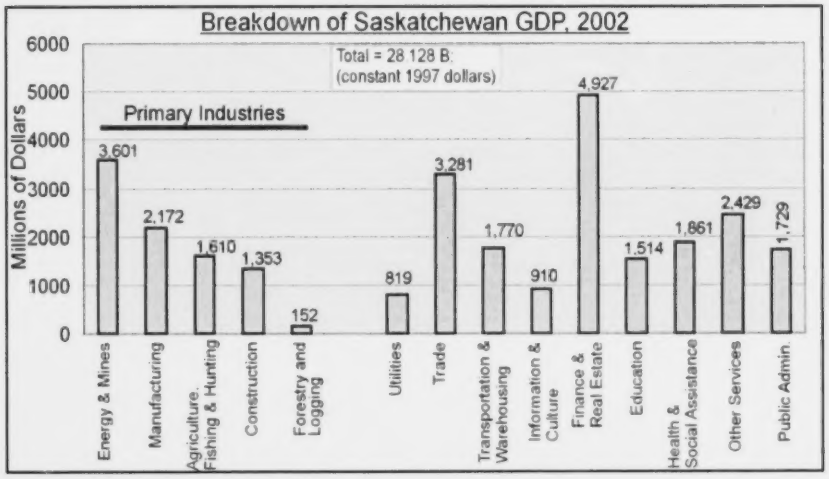
most important supply of uranium and potash respectively. In 2002, Saskatchewan produced 100% of Canada's uranium from five operations, and accounted for 34% of world output. Saskatchewan produced 95% of Canada's potash from ten underground operations including 2 solution mines, and accounted for about 33% of world production and 43% of world trade.



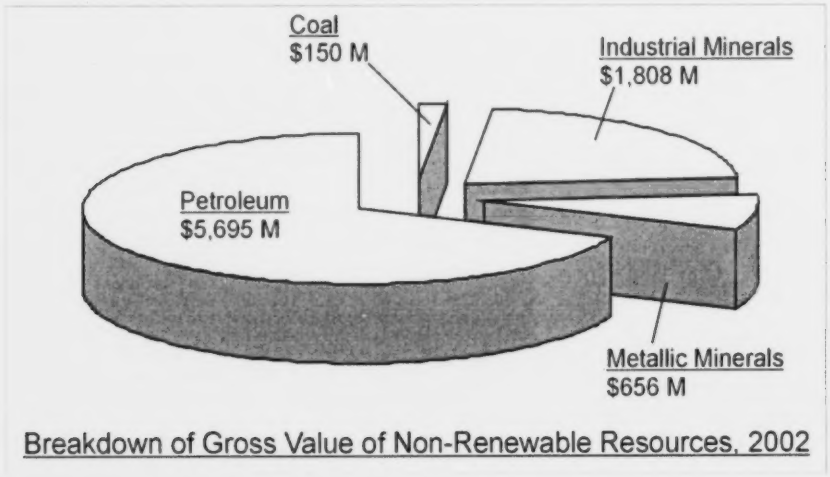


Figure 2. Contribution of the energy and mines sector to the Saskatchewan economy, and the breakdown of the relative values of the non-renewable resources. GDP Data from Stats Canada3. Gross values of non-renewable resources from the Mines Branch, Sask. Industry and Resources.

4.0 URANIUM

4.1 Overview of Production and Exploration

There was production from three operations in 2003, Rabbit Lake, McClean Lake, and the McArthur River Mine / Key Lake Mill operation. Mining at McArthur River was temporarily suspended because of underground flooding. The Eagle Point Mine at Rabbit Lake was the only other active mine. Processing of stockpiled ore at McClean Lake is ongoing. Construction work continued at the Cigar Lake mine-site, with start-up targeted for 2006 providing all of the necessary permits are received.

Global uranium industry leaders Cameco Corporation and COGEMA Resources Inc. operate all of the aforementioned mines and processing facilities and control about 57% and 35% respectively of identified reserves in the basin. Cameco is also developing greater exposure to down-stream profits in the power industry, and on Feb. 14, 2003, closed a deal to secure 31.6% interest in the Bruce Power Limited Partnership which is responsible for power generation from four Bruce B reactors, and two Bruce A reactors which are targeted to come back on stream late in 2003. Together, the six Bruce reactors will supply about 15% of Ontario's electricity.

Production, reserve and resource numbers are summarized in Table 1. Total production of uranium in 2002 was approximately 12 684 t of uranium (32.98 M lbU_3O_8), virtually unchanged from the 2001 annual output of 12 586 t U (32.72 M lb U_3O_8). There was

production from five operations in 2002, although the Sue C pit was mined out early in the year, and the Cluff Lake orebodies were mined out midway through the year. Milling of stockpiled ore continued to the end of 2002 at Cluff Lake. McClean Lake has continued to mill stockpiled ore from JEB and Sue C deposits throughout 2003, and plans to do so until 2006 when Cigar Lake is targeted for start-up. At that point, McClean will mill ore from Cigar Lake as well as from potential future mines at McClean Lake such as Sue E. Overall, forecasts for total annual production for 2003 are down about 33% from 2002 due mainly to the temporary shutdown at McArthur.

The spot price for uranium has continued to rebound from the all time low of US$7.10/lb U_3O_8 at the end of 2000. The restricted spot price was US$9.30 on October 1st 2001, and it rose to US$9.75/lb U_3O_8 by October 1st 2002. The price rise continued through 2003, and has increased significantly since August. The average spot price for the second quarter was US$10.89/lb U3O8, the spot price on October 1st was US$12.20/lb U3O8, and the weekly close on Nov. 17th was US$13.25/lb U3O8.

Table 1: Published reserves and resources for uranium deposits in Saskatchewan at the end of 2002.

Owner(s)*	Property/Deposit	Reserves(t U) (Unstandardized)	Grade %U	Production (t U) 2002***	2003****
	RESERVES**				
Cameco Corporation	Rabbit Lake; Eagle Point Mine	6731	1.06	631	2116
Cameco Corporation COGEMA Res.	Key Lake	272	0.44	193	3615*****
Cameco Corporation – COGEMA Res.	McArthur River P2N	175, 652	19.51	7,111	3615*****
Cigar Lake Mining (Cameco Corporation – COGEMA Res. – Idemitsu – TEPCO)	Cigar Lake	89 045	16.17	-	-
COGEMA Res.	Cluff Lake	0	-	1622	25
COGEMA Res. –Denison – OURD	SUE A, B, C, & D	14 116	1.53	2153	2215
	McClean Lake	4962	1.78	-	-
	JEB	346	0.42	216	165
COGEMA Res. – Denison-OURD – Redstone Resources	Midwest	13 847	3.82	-	-
	RESOURCES				
Cameco Corporation	Rabbit Lake; Eagle Point Mine	769	0.75	-	-
Cameco Corporation - COGEMA Res.-JCU	Dawn Lake	4962	1.43	-	-
Cameco Corporation - COGEMA Res.	McArthur River P2N	42 872	8.05	-	-
Cigar Lake Mining Corp.: (Cameco Corporation – COGEMA Resources - Idemitsu – TEPCO)	Cigar Lake******	45 465	14.35	-	-

Notes:

* Operator first.

** Data in this table does not necessarily conform to the current legal definition of reserves and resources by CIM. Resources are Measured and/or Indicated unless otherwise specified. Data are from a variety of public sources including published reports, public records, corporate websites and Saskatchewan Mining Association Facts Sheets. Data for different deposits are not necessarily comparable.

*** 2002 production figures are from company releases and the Cameco Corporation annual report.

**** 2003 production estimated

***** Combined production from Key Lake and McArthur River ore

****** Inferred Resource.

There are more than a dozen companies actively exploring the basin for uranium, mostly in the eastern part where most of the major deposits are located (see map on back page). Most of the programs are joint ventures with Cameco Corporation and/or COGEMA Resources Inc. Cameco is the most active explorer of the basin, doing both mine-area and greenfields reconnaissance exploration. At the Eagle Point Mine, both surface and underground exploration programs started in 2002 were continued in 2003. Regional programs included continuation of target testing at the La Rocque Lake discovery north-northwest of the Midwest Deposit. Cameco also continued delineation drilling on the Millennium Zone, a new discovery announced at the end of 2002. It is part of the Cree Extension Project, partnered by Cameco, COGEMA and JCU, and located southwest of McArthur River. The best published intersection of 4.28% U_3O_8 over 30.3 m is considered to be ore grade and thickness. The discovery was the result of a persistent follow-up of regional clay alteration zones and geochemical anomalies, with target delineation by sophisticated EM and gravity surveys.

COGEMA also did both greenfields and mine-area exploration in 2003. Reconnaissance target testing continued along the southern margin of the basin in the Mirror River area. Favourable intersections made in 2002 at Caribou Lake located 2 km northwest of the SUE C open pit at McClean Lake were followed-up in 2003 and drilling was complete by April.

Efforts continued in 2003 to advance the Moore Lake prospect in the southwestern part of the basin. Owner JNR Resources announced a new partnership with the International Uranium Corp. of Denver, Colorado, and permitting is completed for a 2003/2004 winter drill program. The best published results from the 2001/2002 winter drill campaign were from DDH ML-25 which returned 0.53% U (0.62% U_3O_8) over 9.1 m including a 4.8 m interval of 1.02% U (1.2% U_3O_8) and including a 0.4 m interval of 10.18% U (12% U_3O_8).

UEX Corporation went public in 2002 to aggressively pursue targets on the consolidated property assets of Pioneer Metals, Cameco and DF Exploration Uranium Ltd. in the Riou Lake, Black Lake and Hidden Bay areas. The best intersection from drilling in the 2002 winter season was 9m of 1.43% U (1.686% U_3O_8) from the West Bear target on the Hidden Bay Property located southwest of the historic Rabbit Lake deposits. Twenty diamond drill holes were completed in the 2003 winter season on five different targets on the property. Extensive mobile metal ion soil sampling initiated in 2002 was continued in the summer of 2003 at Hidden Bay, and three diamond drill holes were completed on the Kewen target. An extensive, $900,000 drill program is planned for the 2003/2004 winter drill season to advance established targets on both the Hidden Bay and Riou Lake properties.

4.2 General Geology

Following the initial discovery at Rabbit Lake in northeastern Saskatchewan in 1968, and discoveries soon after in the early 70's at Key Lake and Cluff Lake, an integrated model for a new class of high grade uranium deposit named *unconformity-type* was developed (Hoeve and Sibbald, 1978). With the discovery of still larger and higher grade deposits like Cigar Lake and McArthur River during the next 20 years, and the continual advancement of sophisticated exploration models (Wheatley et al., 1996), the basin continues to be the worlds premier exploration district for truly world class uranium deposits (Thomas et al., 2000).

Most of the major deposits occur within a northeast-trending belt more than 100 km long in the eastern part of the Athabasca Basin. The circa 1.7 Ga, late Paleoproterozoic Athabasca Group is a post-tectonic succession which is made up mostly of quartz-rich sandstone. The preserved total thickness is generally about 1500 m, with an additional 2500 m of siltstones and carbonates evident only in the Carswell Structure in the southwestern part of the basin. The group unconformably overlies the circa 1.9 Ga Paleoproterozoic Wollaston Group made up mostly of high grade paragneiss assemblages.

The unconformity is a regional focus for uranium ore. There is also a common spatial association between ore and graphite-bearing pelitic gneiss in the basement. All deposits are structurally controlled. They occur along regional, northeasterly trending structures, and ore zones commonly occur along re-activated, high-angle reverse faults delineated by graphitic shear zones in the basement. In the thirty-some years since the introduction of the unconformity model, debate continues as to the relative importance of the unconformity, structure, graphite-bearing units in the basement, and fluid mixing for optimal ore deposition and concentration.

Mineralogically complex, polymetallic ore is characteristic of deposits developed at the unconformity, and mineralogically simple, monominerallic ore is characteristic of basement–hosted deposits and deposits perched above the unconformity. The highest grade ore typically occurs in massive lenses which straddle the unconformity. Extensive alteration envelopes penetrate both the

Athabasca Group and crystalline basement. Hydrothermal alteration assemblages include chlorite, tourmaline, hematite (several episodes), silica and dolomite (eg. Hoeve, 1984). Regional-scale clay alteration zones of illite are common along the major structures that control ore deposition, and are an important exploration criteria (eg. Sopuck et al., 1983).

There is general consensus that mixing of oxidized supergene fluids and reduced basement fluids plays an important role in metal deposition. The extremely high grades of the deposits are the products of prolonged fluid activity along long-lived structures; numerous hydrothermal events have introduced, remobilized and re-concentrated uranium. There are published ages for metal deposition circa 1540-1600 Ma at McArthur River (e.g. Cumming and Krstic), and for metal deposition and/or remobilization/concentration between 1330-1380 Ma at all of the major deposits, and circa 1280 Ma, 1000 Ma, 575 Ma, and 225 Ma throughout the basin (eg. Kotzer and Kyser, 1990).

4.3 Major Deposits
McArthur River Mine / Key Lake Mill

Key Lake Mill: Cameco Corporation, operator (83.333%); COGEMA Resources Inc. (16.667%). McArthur River Mine: Cameco Corporation, operator (69.805%) and COGEMA Resources Inc.(30.195%).

Current Activity. McArthur River was shut down temporarily for 3 months in 2003. Prior to the shutdown, total production for 2003 from Key Lake was forecast at 5,000 t U (13 M lb U_3O_8), but that forecast was downgraded by 27% on July 31st to 3,615 t U (9.4 M lb U_3O_8). By comparison, total annual production was just shy of 7,500 t U in 2002, with a total of 7,111 t U (18.489 M lb U_3O_8) produced from McArthur River ore and an additional 193 t U (0.502 M lb U_3O_8) produced from stockpiled Key Lake ore. Underground development at McArthur is currently on the 530 m, 560 m, 580 m, 620 m and 640 m levels (Figure 3). Panels 1, 2, and 3 of Zone 2 are being mined behind a "freeze wall. Underground exploration drilling continues, focused along strike to the south where the deposit is open.

The temporary suspension of mining at McArthur River was due to partial flooding of the underground operation. Increased water inflow in a development area of the mine was announced by Cameco Corporation on April 7th. All personnel were immediately evacuated. Mining operations were suspended indefinitely, and remedial measures were begun immediately. The mine water treatment plant was modified, and pumps were added to match existing capacity with increased flow rates. Underground, a temporary concrete barrier was constructed to control water inflow, and plans were engineered to permanently seal off the area. By April 14th, water volume being pumped from the mine exceeded inflow rates. On July 2nd, Cameco announced that McArthur was back in production.

History and Setting. McArthur River was discovered in 1989 by Cameco Corporation. Delineation of the deposit by surface diamond drilling was complete by 1992. Underground exploration began in 1993, and in 1997 joint Federal-Provincial approval was granted to begin mine construction. Mining began in December, 1999. The first shipment of primary ore slurry was processed at Key Lake in January 2000. By 2001, annual production reached 6731 t U (17.5 M lb U_3O_8).

McArthur River is the largest high grade uranium deposit in the world, with proven and probable

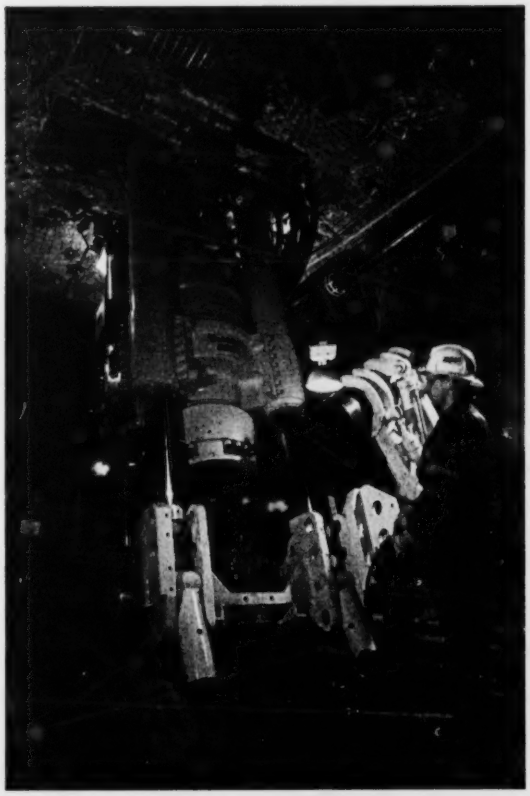


Figure 3: Raisebore drilling on the 530 Level at McArthur River Mine, 2003. Photo courtesy of Cameco Corporation.

reserves of 175 652 t U (456.7 M lb U_3O_8) and an average grade of 19.51% U (23% U_3O_8). Grades within the orebody are up to 59.4% U (70% U_3O_8) locally, and composite grades of 25.4% U (30% U_3O_8) over several meters thickness are common. Uranium ore is structurally controlled by the P2N fault, which strikes N45°E and dips 45° to 60° southeast, with an average offset of 70 m. Ore is hosted within Athabasca Group sandstone, the fault zone, and basement pelitic gneiss of the Wollaston Group.

Mining and Processing. Non-entry raise-bore mining is the sole method being used at McArthur River (Figure 3). Line-of-sight remote controlled equipment is used to minimize workers' exposure to radiation. High grade ore is comminuted in a grinding system on the 640 m level, pumped to surface as a mud-like slurry, then stored in tanks until loaded into specially designed containers for the 80 km truck haul to Key Lake.

Before processing, the primary ore slurry from McArthur is blended with stockpiled low grade ore from Key Lake, and dry-hauled low grade ore (0.03% – 2.0% U_3O_8) from McArthur. An average head grade of about 4% U_3O_8 is sought to maximize mill recovery rates. The old Deilmann Pit of the Key Lake Mine is used for tailings disposal.

Cigar Lake

Cameco Corporation, operator (50.025%), COGEMA Resources Inc. (37.100%), Idemitsu Uranium Exploration Canada (7.875%) and TEPCO Resources Inc. (5.0%).

Current Activity. Site preparation work continued at Cigar Lake in 2003 and included partial construction of the collar for the Number 2 Shaft, and pouring of the foundation for the headframe and hoist room. Construction of the mine site was initiated in July 2002, following successful Phase I licensing. Licensing approval for the second and final phase of construction is not expected until midway through 2004. Total construction time for the mine is estimated at 27 months. Underground mining is targeted to commence in 2006, pending completed regulatory approval, and favourable market conditions. Total capital cost to put Cigar Lake into production is estimated at $350 M.

Overall, three separate but integrated projects which proceeded in 2003 must all be taken to completion before underground production at Cigar Lake can commence:

- Minesite construction, including production and ventilation shafts.
- Regulatory approval for safe disposal of waste rock in the McClean Lake SUE C pit.
- Regulatory approval to increase annual capacity of the JEB mill at the McClean Lake Mine to 4616 t U (12 M lb U_3O_8), and successful licensing for project construction.

History and Setting. Cigar Lake was discovered in 1981 by COGEMA Canada Ltd. Following delineation of the deposit by a 170 hole diamond drill program in 1985, ownership was transferred to the Cigar Lake Mining Corporation. Phase I test mining was completed in 1993, and Phase II test mining, which commenced in 1997, was completed late in 2000. Cameco became the operator of the Cigar Lake Project at the end of 2001, and will continue as mine and mill operator, under the guidance of the Cigar Lake Joint Venture Management Committee with company representation as per ownership.

Cigar Lake is the world's second largest high-grade uranium deposit with total proven and probable reserves of 89 045 t U (231.5 M lb U_3O_8) at an average grade of 16.17% U (19.07% U_3O_8). Total inferred resources are 45 465 t U (118.2 M lb U_3O_8) at an average grade of 14.35% U (16.92% U_3O_8). Unlike McArthur River, the Cigar Lake Deposit occurs exclusively above the sub- Athabasca Group unconformity. Host rocks are conglomerate and sandstone of the Manitou Falls Formation. The deposit is above a topographic rise in the basement surface which coincides with a structurally controlled basement mylonite zone composed of augen-textured graphite- and sulphide-bearing sillimanite-cordierite-garnet pelitic gneiss of the Wollaston Group. The main ore body is a massive pod about 2150 m long along the unconformity, and about 430 m below surface. The high grade eastern part of the orebody is up to 100 m wide and 20 m thick. There is intense proximal clay alteration and silica bleaching, and an extensive regional clay alteration envelope.

Mining and Processing. Mining at Cigar Lake will be done in two phases. Phase I will extract the high grade eastern portion of the orebody and will last for 15 years. After a four year phase-in, the optimal annual production is targeted at 6 924 t U (18 M lb U_3O_8). Phase II will extract the remaining, lower grade portion of the orebody. It will last for approximately 25 years, with targeted annual production lowered to 2 308 t U (6 million lb U_3O_8).

Access to the underground workings is by the No. 1 shaft. A second shaft will provide alternative access and will be the exhaust outlet for the primary

ventilation system. Phase II mining will require a third shaft. Drifts will be developed on two levels in basement rock beneath the orebody. The ore will be frozen and mined in panels from the upper production level using a jet boring, non-entry method. The ore will be slurried and pumped to the surface through pipes installed in the secondary containment unit within the No. 2 shaft.

An application was filed in 2002 to process all of the primary ore slurry from Cigar Lake at the McClean Lake concentrator (JEB Mill), operated by COGEMA. If successful, the Rabbit Lake facility operated by Cameco would receive 57% of the pregnant solution from McClean for further processing and production of yellow-cake, a proportion originally agreed to for the primary ore.

Rabbit Lake
Cameco Corporation, operator (100%)

Current Activity. The Eagle Point Mine will complete it's first full year of production in 2003, following the re-opening of the mine midway through 2002 by Cameco Corporation. The production forecast for 2003 is 2,116 t U (5.5 M lb U_3O_8). The Rabbit Lake Facility is now the longest running uranium mining-milling operation in Saskatchewan. At start-up, total reserves were approximately 6731 t U (17.5 M lb U_3O_8), sufficient for a three year mine life at a targeted annual mill production rate of about 2308 t U (6 M lb U_3O_8). Total output from 5 months of production in 2002 was 631 t U (1.64 M lb U_3O_8).

Surface exploration which commenced in 2002 to identify new reserves at Eagle Point continued in 2003. Underground exploration drilling began in September of 2002 and also continued through the spring of 2003. It is hoped that the Eagle Point Mine will have sufficient ore to supply the Rabbit Lake mill facility until the start-up of the Cigar Lake Mine which is targeted for 2006. A proposal is being reviewed by regulators to process all primary ore from Cigar Lake at the McClean Lake facility, and to ship 57% of the pregnant solution to Rabbit Lake for final stage production of yellow-cake.

History. The Rabbit Lake Deposit was discovered in 1968, and in 1975 became the first deposit in the rapidly emerging Athabasca Uranium District to be put into production. It was exhausted in 1984, the pit was turned into a tailings facility, and mining shifted to the Collins Bay B Zone and D Zone deposits. All open pit operations were suspended in 1994, but were re-activated on the A Zone Deposit between 1995 and 1997, and on the D Zone Deposit between 1995 and 1996. Underground operations at the Eagle Point Mine commenced in 1991 and continued until 1999 when all mining activity at Rabbit Lake was suspended. Processing of stockpiled ore continued until depletion in 2001.

Total production from the original Rabbit Lake Deposit was 15,769 t U at an average grade of 0.27% U, with peak annual production of 2038 t U (5.3 M lb U3O8) obtained from processing ore grading around 0.4% U. Once depleted, higher grade ore from the underground Eagle Point Mine was typically blended with stockpiled lower grade ore from the B and D deposits in order to maximize mill recovery. Production increased from 2885 t U (7.5 M lb U_3O_8) in 1994 to 4616 t U (12 M lb U_3O_8) in 1997.

McClean Lake
COGEMA Resources Inc., operator (70%), Denison Energy Inc., (22.5%) and OURD (Canada) Co. Ltd. (7.5%).

Current Activity Milling of stockpiled ore continued in 2003 at the McClean Lake Operation. Total production in 2002 was 2 372 t U (6.1 M lb U_3O_8). SUE C Deposit low and high grade ore and JEB Deposit low grade ore was blended for an average head grade of 1.94% U (2.2% U_3O_8). Regulatory approval has been granted to increase annual production to 3077 t U (8.0 M lb U_3O_8).

The SUE C1 and SUE C2 extension pits are mined out at 100 m and 140 m depths respectively. Stockpiled SUE and JEB ore will continue to feed the mill until the arrival of ore from the Cigar Lake Mine which is targeted for start-up in 2006. . Mining ore at SUE C was completed in February 2002. The Sue C orebody provided 650 000 t of ore at just over 2% U (2.6% U_3O_8) to produce 14 031 t U (36.4 M lb U_3O_8).

The SUE A and B deposits might be developed sometime after 2004. The SUE A deposit would be mined from an extension of the SUE C pit. The SUE B deposit will require a separate pit. The company is also evaluating a third deposit named SUE E.

Exploration of the McClean Lake property continued in 2003. Follow-up work was done at Caribou Lake located 2 km northwest of the Sue C pit where high grade intersections were obtained in 2002. A delineation drill program completed this year extended the zone of mineralization to approximately 100-125m below surface. Among the best intersections were 8.7m of 12.99% U (15.32% U_3O_8) in DDH S728, 14.1m of 10.10% U (11.91% U_3O_8) in DDH S769 and 4.0m of 15.02% U (17.71% U_3O_8) in DDH S736. All data are expressed as equivalent uranium grades at a 0.1% U cut off (0.12% U_3O_8)

based on down-hole radiometric probing. Geochemical analyses were conducted on the core and will be used to calculate a preliminary resource.

Cluff Lake
COGEMA RESOURCES INC. operator (100%).

Current Activity. Currently under *care and maintenance*, physical work at the site is on hold. An onsite workforce of about 30 COGEMA Resources employees and contractors tends mainly to site security and maintenance.

COGEMA Resources submitted the first draft of the Cluff Lake Decommissioning Plan's Comprehensive Study to the Canadian Nuclear Safety Commission (CNSC) in early 2001. The five-volume document details every aspect of COGEMA's plan to return the site to its natural state, including the proposed plan, options, mitigation and environmental effects of decommissioning on the mining areas, tailings management area (TMA), mill complex, camp, airstrip and other structures.

The review and approval process is expected to be complete by early 2004. COGEMA has recently made official application for the final decommissioning licence. Once approval has been received on the CSR, the CNSC may proceed with the licensing activities. The decommissioning is expected to take 2 to 3 years.

History. Cluff Lake was one of the early discoveries in the Athabasca Basin. It was found by Mokta Canada Ltd. in 1968 during a reconnaissance follow-up of regional radiometric data. Open pit mining from the small, but high grade D zone began in 1979 and was completed in 1980, but milling continued until 1983. The second phase of mining of numerous, lower grade, basement-hosted deposits began in 1983. Mining of the Dominique-Janine orebody ceased on May 31st, 2002, and stockpiled ore was milled until year-end; Cluff Lake officially ceased production on December 10, 2002. Production in 2002 was 1654 t U (4.3 M lb U_3O_8), the highest annual output since 1997. Final shut-down was originally scheduled for 2000, but the operation was extended because of higher ore grades, available capacity in the Tailings Management Area (TMA), lower production costs and improved productivity. Total production during the mine's 22-year life span was more than 62.5 M lb U_3O_8.

Numerous deposits were mined at Cluff Lake. Open pit production was from the D, Claude, Dominique-Janine and Dominique-Janine extension operations. Underground production came from the OP, Dominique-Peter and Dominique-Janine mines. A gold mill was added in 1987 and recovered 8,000 oz Au and 800 oz Ag.

Midwest Property
COGEMA Resources Inc., operator (54.8%), Redstone Resources Inc. (20.7%), Tenwest Uranium Ltd. (20%) and OURD (Canada) Co. Ltd. (4.5%).

The Midwest Property was dormant in 2003, although economic evaluation of the deposit is ongoing. COGEMA Resources Inc. successfully addressed the safety and environmental concerns identified following the first EIS review process for the Midwest Mining Project in 1991. Following project approval from the joint federal-provincial panel in 1998, a detailed review of the Midwest project was initiated to optimize production.

The Midwest Deposit is slated for development within the next decade to provide additional ore for the McClean Lake mill complex. The deposit is concentrated in a 200 m long zone below south McMahon Lake. Ore will likely be mined by open pit methods, then trucked to McClean Lake for processing. Targeted annual production is 2 200 t U (5.7 M lb U3O8) per year for six years.

5.0 GOLD
5.1 Overview

The Seabee Mine, owned by Claude Resources, completed its 12th year of continuous operation. It has surpassed the 600,000 oz mark and is Saskatchewan's largest ever primary gold producer.

Gold exploration expenditures are forecast to exceed $3 M in 2003, an increase of about 25% compared to last year, and a fourfold increase from just three years ago. The steady increase parallels the rise in gold price from the month-end close of US$264.80 on Oct. 31, 2000 to the close of US$397.30 on Nov. 14th, 2003.

Work by junior exploration companies and *small-cap* mining companies is being done in the La Ronge Domain, the Glennie Domain, and in the Beaverlodge District in the northwest part of the province. Successful exploration by Claude Resources around its Seabee Mine produced encouraging results in 2003, particularly on the West Porky Zone, and will be continued in 2004. To the east, Golden Band Resources continued to work on its consolidated holdings in the La Ronge Gold Belt. The Bingo Property was drilled late in 2002, the Phantom and Forutna targets were drilled in the 2003 winter season, and drilling on the Memorial Property

Table 2: Published reserves for select gold deposits in Saskatchewan.

Map No.[1]	Ownership (at closure, if mined out - operator first; at present if deposit not yet mined)	% Share	Mine or Deposit	Reserves(t)	Production (oz)	Grade g/t	Grade oz/ton
			MINED OUT OR TO DATE				
Au 17	Cameco Corporation	50	Star Lake Mine		76,947		
	Starrex Minng Corporation Ltd.	35	21+Rush zones[2]	182 291		14.7	0.43
	Uranerz Exploration and Mining Ltd.	15					
Au 18	Cameco Corporation	80	Jasper Mine[2]		82,697		
	Shore Gold Fund	20		140 127		18.8	0.55
Au 17	Corona Corporation	30	Jolu Mine		203,751		
	International Mahogany Corporation	70	Rod+Mallard[2]	472 220		14.4	0.42
Au 25	Claude Resources Inc.	100	Seabee		603,720 [3]		
				1 034 200[4]		13.7	0.40
Au 21	Cameco Corporation	100	Contact Lake Mine		188,210		
			Bakos zones[2]	1 304 000[5]		8.00	0.23
Au 12	Golden Band Resources Ltd.	100	Komis		26, 885 [6]		
Au 2	Greater Lenora Resources Corp.	100	Box Mine		64,066		
Au 33	Pamon Gold Mines- O.G. Macdonald	100	Prince Albert	4,882			
			RESERVES				
Au 25	Claude Resources Inc.	100	Seabee Mine	661200 [7]		8.03	0.22
Au 3,2	Greater Lenora Resources Corp.	100	Box & Athona	17 340 000		1.9	0.055
Au 10	Kristo Gold	100	Anglo Rouyn Mine	1 300 000[8]		0.55	0.016
Au 12	Golden Band Resources	100	Komis + EP	687 300(m) [9]		10.3	0.30
				573 300(p) [9]		13.4	0.39
			RESOURCES				
Au 13	Golden Band Resources	100	Corner Lake	181 500		13.0	0.38
na	Golden Band Resources	100	Bingo	164 215		11.6	0.3
Au 21	Cameco Corporation	100	Contact Lake				
			(Bakos zone)	92 000		7.5	0.22
Au 22	Cameco Corporation	100	Pap SW	233 000		8.0	0.23
Au 25	Claude Resources Inc.	100	Seabee	1 415 000[7]		8.0	0.23
Au 33	Claude Resources Inc.	35	Laural Lake	210 000		15.0	0.44
	Cameco Corporation	32.5					
	Husky Oil	32.5					
Au 15	Golden Band Resources Ltd.	100	Niko (Kaslo)	165 700		4.8	0.14
Au 14	Golden Band Resources Ltd.	100	Tower East	922 000		6.9	0.20
Au 19	Masuparia Gold Corporation	100	Greywacke	297 555		9.26	0.27
Au 20	Radcliffe Resources Inc.	100	'North' Lake	2 360 000		2.4	0.07
Au 10	Petro Plus Inc.	100	Twin	351 000		6.2	0.18
Au 11	Golden Band Resources	100	Weedy B	314 000		4.8	0.14
		100	Golden Heart	687 000		10.3	0.30
Au 12	Golden Band Resources	100	Komis + EP	573,300		13.4	0.39
na	Golden Band Resources	100	Memorial	476,000		2.1	

Notes:

Data in this table does not necessarily conform to the current legal definition of reserves and resources by CIM. Resources are Measured and/or Indicated unless otherwise specified. Data are from a variety of public sources including published reports, public records, corporate websites and Saskatchewan Mining Association Facts Sheets. Data for different deposits are not necessarily comparable.

1 Map No. indexed to Mineral Resources Map (Saskatchewan Geological Survey, in press)
(m) = mineable reserves; (p) = possible reserves

2 Mined out

3 Production to Aug. 31st, 2003

4 Published reserves in 1990

5 Published reserves at start-up 1995

6 At suspension of mining January 1997

7 At year-end 2002

8 Anglo Rouyn Mine tailings also contain 1.97 g/t (0.058 oz/ton) Ag, 0.15% Cu and 4.5% magnetite

9 Golden Rule Resources Ltd. 1995 Annual Report. Reserves for Komis are total geologic and include 26,885 mined ounzes

continues to produce narrow but high grade intersections. Reconnaissance regional-scale till geochemistry is ongoing to identify new targets in the district. Farther to the northeast in the La Ronge Domain, Masuparia Gold Corp. expanded its land holdings on the Greywacke Property and continued delineation and drill testing of established gold zones. GLR Resources Inc. continued to advance financing for development of the Box and Athona gold deposits in the historic Goldfields Camp southeast of Uranium City using open pit mining methods and direct-extraction cold-acid leach processing technology. Past and present production and reserve figures are summarized in Table 2.

Most gold occurrences in the La Ronge and Glennie domains fall into the class of mesothermal vein deposits, or orogenic lode gold deposits. Gold occurs within quartz veins and quartz vein stockworks, commonly associated with shear zone systems. Nearly all deposits are hosted within plutons that fall within a late Trans Hudson, Paleoproterozoic age range of 1.86 -1.8 Ga.

5.2 GLENNIE DOMAIN

Seabee Mine (Figure 4)

Claude Resources Inc., operator (100%)

The Seabee Mine is located about 120 km NNE of La Ronge in the central part of the Glennie Domain. Claude is currently developing on the 510 and 630 m levels of the mine with very positive results from ore with higher than average grade. A total of 13,100 ounces were sold in the third quarter of 2003, compared with only 10,600 ounces in the same period in 2002. Operating costs were US$232/oz for the third quarter, and the average realized gold price was US$381/oz. A total of 96,618 t of ore were mined in the first six months of 2003 at an average grade of 8.2 g/t (0.24 oz/ton) Au to produce 24,100 oz Au, compared to a total of 106 400 t of ore was mined in the first half of 2002 at a much lower grade of 4.8 g/t (0.14 oz/ton) Au to produce only 16,000 oz Au. Total annual production in 2002 was 41,500 ounces of gold, with an average head grade of 6.59 g/t (0.19 oz/ton) Au; forecasted total annual production for 2003 is 52,000 ounces. A target production rate of 550 tpd was met in the first three quarters of 2003, and a further increase to 700 tpd will occur Nov. 1st. Overall, increased ounces and lower production costs in 2003 are the result of mining higher grade ore combined with efficiency and throughput upgrades made to the mill in 2002.

Since production began in 1991, about 2.1 M t of ore have been mined from above the 600 m level as of Aug. 31, 2003, at an average grade of 8.32 g/t (0.24 oz/ton) Au and an average recovery rate of 92.1% to produce 603 720 ounces. Some of the best drill holes in mine history were drilled at the 650 m levels in 2003, so as development between the 425 to 800 m levels proceeds, the company is well positioned to meet or exceed its annual target production rate of 52 000 ounces. An independent audit in March, 2003 reported proven and probable reserves of 661 200 t at 8.03 g/t (0.23 oz/ton) Au, and inferred resources of 1.42 M t at 8.0 g/t (0.23 oz/ton) Au.

Extension of the main shaft to the 600 m level was essentially complete by November. The new shaft will improve mining methods and reduce operating costs. The current development on the 510 m and 630 m levels will facilitate shrinkage mining of the higher grade ore from the 2B and 2C zones. A new tailings dam was commissioned in the second quarter of 2003 and has capacity sufficient for the mine life.

Figure 4: Seabee Mine, located in the Glennie Domain some 120 km northwest of La Ronge. Photo courtesy of Claude Resources Inc.

There was also active exploration at Seabee in 2003. Extended surface and underground drill programs are ongoing. Following up on its 2002 **West Porky** discovery 2 km north of the Seabee mine, Claude completed 5,775 m in 28 holes of infill drilling on the **Main Zone**, complemented by 2,913 m in 13 holes testing the structure to the west-northwest where two styles of gold mineralization are recognized: 1) shear-related sulfide replacement in altered mafic volcanic rocks and; 2) free gold associated with silicification of a quartzo-feldspathic arenite. The zone trends SSE, is steeply dipping and plunges moderately towards the southeast. The 2003 drill program successfully confirmed continuity over 400 m of strike and 250 depth within the Main Zone, and delineated a new high grade zone named the **West Zone** which is hosted by feldspathic arenite and is located one kilometer to the west-northwest of the Main Zone. The new zone is currently delineated by shallow drill holes only, but its depth potential, and relationship to the Main Zone are high priorities for continued drill testing in 2004. Significant drill intersections to date are summarized in Table 3.

Table 3: Significant 2003 drill results from the West Porky Main Zone and the newly discovered West Zone.

Hole #	Length (m)	Grade (g/t)
West Porky Main Zone		
PKY02-01	3.05	54.33
PKY02-01	3.00	14.12
PKY02-04	3.85	15.79
PKY02-08	4.30	3.06
PK03-20	19.00	3.00
PK03-20	3.85	7.26
PK03-20	2.70	6.36
PK03-22	7.95	7.15
PK03-24	2.80	11.77
PK03-27	4.90	7.16
PK03-27	2.40	12.50
PK03-27	0.60	7.68
PK03-30	2.20	11.08
West Zone		
GA03-1*	2.25	5.57
GA03-4*	1.80	10.54
GA03-6*	2.95	33.22
GA03-6*	2.40	11.81
GA03-6*	1.65	14.66
GA03-10*	7.28	2.73
GA03-10*	2.25	5.88
GA03-12*	1.75	9.05

5.3 FLIN FLON DOMAIN

By the end of 1999, Claude Resources Inc. had earned a 35% working interest in the 14 300 ha Amisk Joint Venture property (Cameco and Husky). The company can earn a further 35% by spending $14 M or bringing the property into commercial production on or before the agreement's tenth anniversary in 2005. The optioners, Cameco and Husky, agreed to a one year extension of the work commitments as prescribed by the option agreement in 2000 and 2001. At Laural Lake, Claude deferred a proposed 2003 program of re-mapping of existing underground workings, focused drilling, and limited development of raises.

5.4 LA RONGE DOMAIN

Golden Band Resources Inc. and Masuparia Gold Corporation were active in 2003 in the La Ronge Domain. Exploration was done on numerous properties, and ranged from grassroots reconnaissance to advanced-stage exploration around former mines.

La Ronge Gold Belt: Waddy Lake Camp

Golden Band Resources (100%)

Golden Band Resources has consolidated a large land package in the La Ronge Gold Belt (Figure 5). The holding exceeds 50,000 hectares. The Jolu Mill Complex which has been kept on *care and maintenance* since the mid 1990's is centrally located (location in Figure 5). Historic resources contained within numerous small, but high-grade past-producers exceed 800,000 oz Au (Saskatchewan Geological Survey, in press). Economic models are being developed to evaluate the central processing of high grade ore from numerous satellite bodies in the greater Waddy Lake area.

Late in 2002, a winter drill program was carried out on the Bingo target on the Dickens West Property. Ten holes totaling 1,805 m were completed. Resources using a cut-off of 5 g/t Au are 50,300 t averaging 11.71 g/t (18,925 contained ounces) Au in the *indicated* category, and 114,000 t averaging 11.91 g/t (43,633 contained ounces) Au in the *inferred* category.

Golden Band carried out an aggressive regional exploration program in 2003 to test the Memorial,

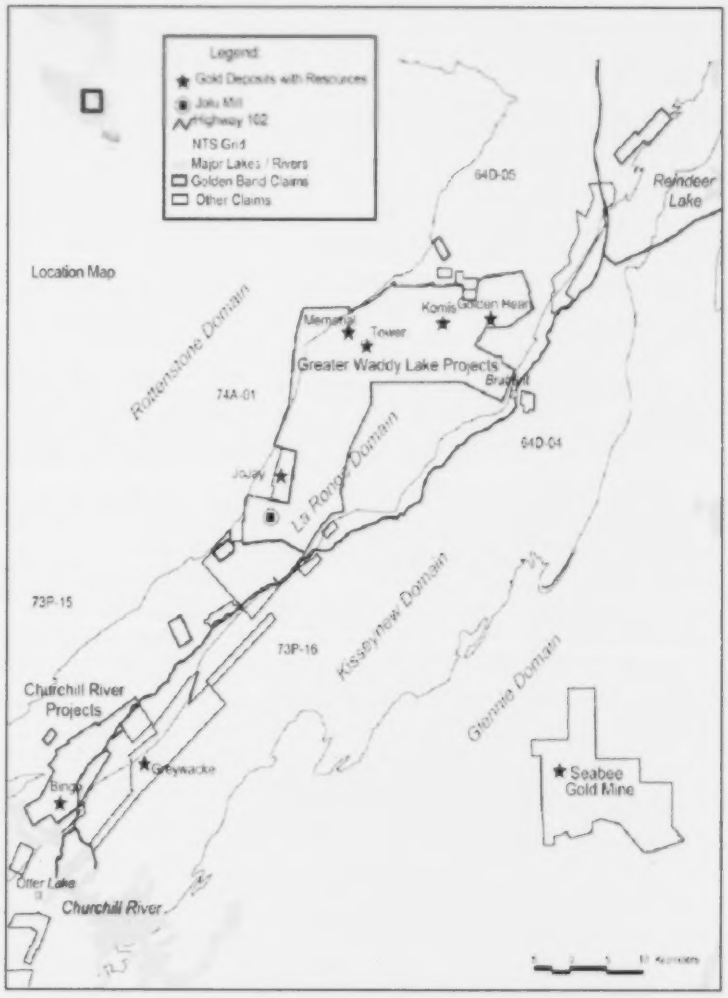


Figure 5: Current holdings and major active deposits in the northern part of the La Ronge Gold Belt. Location of Greywacke Property and Seabee Mine also shown. Courtesy of Golden Band Resources.

Phantom and Fortuna gold showings located near Tower Lake in the greater Waddy Lake area of Northern Saskatchewan. Golden Band Resources has consolidated a large land package in the La Ronge Gold Belt (Figure 5). The holdings exceeds 50,000 hectares. The Jolu Mill Complex which has been kept on care and maintenance since the mid 1990's is centrally located (location in Figure 5). Historic resources contained within numerous small, but high-grade past-producers exceed 800,000 oz Au (Saskatchewan Geological Survey, in press). Positive economic models for the camp are based on a centrally located mill facility to process ore extracted from numerous satellite deposits.

The Memorial gold deposit is 1.5 km northwest of Tower Lake and contains an indicated mineral resource of 476,000 t averaging 2.1 g/t Au (i.e. 38, 480 oz Au at a cut off of 1 g/t Au). The gold mineralization is hosted by a pillowed mafic volcanic sequence adjacent to a greywacke assemblage that includes a sulfide facies iron formation. The Memorial zone plunges 30° to the northeast and has been traced over 200 meters in length. It is up to 30 meters in width at its southern extent. In 2003, 28 holes (1,968 m) were completed at Memorial. Very high grade intersections include 1 m @ 290 g/t (8.5 oz/ton) Au in DDH MM-19, 1 m @ 217 g/t (6.3 oz/ton) Au in DDH MM-21, 1 m @ 491.8 g/t (14.3 oz/ton) Au and 2 m @ 267 g/t (7.8 oz/ton) Au in DDH MM-35, and 0.9 m @ 171.5 g/t (5.0 oz/ton) Au in DDH MM-36.

The Phantom and Fortuna exploration targets are inferred to be a westerly extension of the Tower East Deposit. They form a 2 km long zone which is probably related to the Byers Fault. Nine holes totaling 1033.5 m were completed in 2003 to test these two targets. The more significant intersections at the Phantom target are 1 m @ 6.93 g/t (0.19 oz/ton) Au, 3.6 m @ 1.38 g/t (0.04 oz/ton) Au, 1 m @ 3.30 g/t (0.10 oz/ton) Au, and 1.2 m @ 3.23 g/t (0.09 oz/ton) Au. The more significant intersections at the Fortuna target are 1 m @ 3.2 g/t (0.09 oz/ton) Au and 3 m @ 2.35 g/t (0.07 oz/ton) Au.

Golden Band also carried out an extensive regional till sampling program between June and September 2003, including on-site sample processing and separation of gold grains (Figure 6). Approximately 1400 till samples were collected within a 30 km long by 10 km wide corridor between the Jolu Mill and Tower Lake. A total of 53 bulk samples approximately 45 kg in size were also collected to evaluate the economics of mining the Riddle Till, a gold-in-till dispersion train which originates from the EP Deposit. An additional 400 till samples were also collected on the Dickens West Property located between the Churchill River and Bervin Lake.

Figure 6: On-site processing of bulk till samples by Golden Band Resources on it's consolidated holdings in the Waddy Lake region, central La Ronge Gold Belt.

Greywacke Property
Masuparia Gold Corporation

In January 2003, Masuparia Gold Corporation announced results of its 2002 exploration program on the Greywacke Lake gold property located some 85 km NNE of La Ronge in the east-central part of the La Ronge Domain (Figure 5 and back page). Thirteen drill holes totaling 1000 m tested the gold-bearing zone. Two diamond drill holes tested the Greywacke North gold zone at a depth of 200 m. Hole 02-76 cut 10.5 g/t (0.306 oz/ton) Au over a width of 1.8 m including 1.08 m at 16.1 g/t (0.468 oz/ton) Au. Hole 02-68 cut 4.9 g/t (0.143 oz/ton) Au over a width of 1.58 m including 8.2 g/t (0.239 oz/ton) Au over 0.79 m.

Fifteen additional holes tested the zone at shallow depth. Ten of these holes intersected gold mineralization over true widths up to 16.5 m, with grades up to 18.92 g/t (0.552 oz/ton) Au over 4.10 m. The average grade of the 10 holes is 7.54 g/t (0.22 oz/ton) Au over a true width of 9.13 m.

5.5 BEAVERLODGE DISTRICT
Goldfields Project
GLR Resources Inc. operator (100%)

Work in 2003 focused on securing financing to start production at the Box and Athona gold deposits. GLR signed an agreement with Union Financial Services Corp. in May to secure financing, but terminated the agreement in September because of lack of progress. In October, GLR arranged for a $5M private placement of Class A and Class B shares, to, among other things, initiate work on the Goldfields Project. Environmental approvals for the project are pending.

The Box Mine is a historic producer from the late 1930's, located south of Uranium City on the north shore of Lake Athabasca, in the southern part of the Beaverlodge Domain. GLR obtained the property in 1987, and completed a surface drill campaign in 1994 and 1995 which was the basis for a reserve estimate released in 1988 of 10.8 M t @ 1.92 g/t Au for Box and 6.54 M t @ 1.83 g/t Au for Athona. In the spring of 2002, the Board of Directors at GLR tabled conditional approval to proceed with the development of the Box and Athona gold deposits. The production decision was based on an updated in-house engineering study that indicated the project was financially robust at US$300/oz Au and an exchange rate of C$1.50 to US$ 1.00. An all-gravity, cold acid leach direct extraction process using Gekko equipment will be used. Key points in the study include: 1) Initial capital costs of $16 M, including $4 M for mining, $8 M for treatment, and $4 M for service and administration; 2) Gold production of 45,000 ounces per year averaged over 10 years; 3) Operating cash costs below US$ 200 per ounce of gold, and; 4) Initial mining rate of 1500 tpd, increasing to 2000 tpd, using open pit methods. The ten year plan is based on a measured and indicated resource of approximately 500,000 contained ounces at a grade of 2.7 g/t (0.08 oz/ton) Au. The company's overall plan for the Goldfields Property is to expand the Box mine plant into a central treatment facility capable of processing ore from both the Box and Athona deposits, and from potential future deposits pending successful exploration of known gold targets elsewhere on the property.

BASE METALS
6.1 Production

Base metals were produced exclusively from the Flin Flon Domain in the east-central part of the province in 2003. They were mined from the Konuto Lake Deposit, and that part of the Callinan Deposit in Saskatchewan. The McIlvenna Bay deposit remained dormant in 2003. Current base metal reserves and resources are summarized in Table 4.

Callinan Mine
Hudson Bay Mining and Smelting Co. Limited (100 % subject to 6.67 NPI with Callinan Mines Ltd.)

The Callinan Mine is a VMS deposit that consists of three east-plunging zones (South, East and North) within a sequence of rhyolitic rocks that are likely equivalent to the host rock ("mine rhyolite") of the Flin Flon Mine. Only the upper part of the Callinan North deposit extends into Saskatchewan. The mine opened in April 1990. Total production to the end of

Table 4: Published reserves for select Base Metal deposits in Saskatchewan.

Owner (s) *	Property	Metric Tonnes	% Cu	% Zn	% Pb	% Ni	% Co	g/t Au	g/t Ag
	MINEABLE RESERVES								
Foran Mining	McIlvenna Bay	14 500 000	0.91	6.08	0.40	-	-	0.45	23.70
Hudson Bay Mining	Callinan Sask Portion	595 064	1.15	3.14	-	-	-	1.55	19.30
Hudson Bay Mining	Konuto Lake	876 558	3.89	1.31	-	-	-	2.14	8.63
	GEOLOGICAL RESOURCES								
Leader Mining International Inc.	Knife (Mokoman) Lake	20 000 000	0.74	-	-	-	-	-	-
Claude Resources	Elizabeth Lake	4 985 938	0.73	-	-	-	-	-	-
Boart–Longyear	Brabant/PEG	4 857 851	0.57	5.19	0.28	-	-	0.22	22.59
Hudson Bay Expl.	FON Zone	4 650 307	-	4.60	-	-	-	-	-
Con. Pine Channel	Axis Lake	3 402 000	0.60	-	-	0.60	0 15	-	-
Petro Plus Inc.	George Lake	2 630 880	-	3.67	0.53	-	-	-	-
Aur Resources	Schotts Lake	1 983 850	0.61	1.35	-	-	-	-	-
Aur–Cameco Corp.	Bigstone Lake	1 451 000 308 000	2.90 -	- 11.20	- -	- -	- -	- -	- -
Shane Resources	Brownell Lake	1 251 900	0.56	1.75	-	-	-	-	-
Cons. Pine Channel	Currie Lake	47 536	-	-	-	0.79	-	-	-

* operator listed first

Note: Data in this table does not necessarily conform to the current legal definition of reserves and resources by CIM. Resources are Measured and/or Indicated unless otherwise specified. Data are from a variety of public sources including published reports, public records, corporate websites and Saskatchewan Mining Association Facts Sheets. Data for different deposits are not necessarily comparable.

2002 is 5 983 501 t of ore grading 1.41% Cu, 3.93% Zn, 2.14 g/t Au, and 24.26 g/t Ag. Of this amount, 281 919 t grading 1.44%, 4.17% Zn, 1.63 g/t Au and 15.97 g/t Ag came from the Saskatchewan part of the deposit. Saskatchewan production in the first eight months of 2003 was 54 996 t of ore grading 1.54% Cu, 2.53% Zn, 1.54 g/t Au, and 14.95 g/t Ag from the North Zone lens. Production for the remainder of the year is estimated at approximately 18 300 t of ore grading 1.28% Cu, 2.70% Zn, 1.54 g/t Au and 16.46 g/t Ag.

As of January 1, 2003, mineable resources in the Saskatchewan part of the North Zone were 595 064 t grading 1.15% Cu, 3.14% Zn, 1.55 g/t Au and 19.30 g/t Ag.

Konuto Lake Mine

Hudson Bay Mining and Smelting Co. Limited, operator (100 %)

The Konuto Lake Mine is a VMS-type deposit hosted in a Paleoproterozoic belt of juvenile volcanic arc rocks. The geological model is a mafic hosted, back-arc rift type Cu-Zn deposit. The north-northeast-striking, nearly vertical dipping, and steeply south-plunging deposit has a strike length of approximately 180 m. The Cu-Zn-Au-Ag mineralization occurs in four sulfide lenses including four massive sulfide lenses (Lens 1, 3, 4 and 5) located within a broad zone of oblique-reverse faulting. The ore is hosted by mafic metavolcanics and consists of sulfide breccias and stockwork ore types mainly composed of chalcopyrite-pyrrhotite-sphalerite and minor pyrite. The ore zones extend from 18 m to approximately 570m below the surface.

At January 1st, 2003, mineable reserves and resources were 876 558 t of ore grading 3.89% Cu, 1.31% Zn, 2.14 g/t Au and 8.63 g/t Ag. The mine opened in 1998. Total production to the end of 2002 is 1 071 942 t of ore grading 4.37% Cu, 1.47% Zn, 2.01g/t Au and 8.63g/t Ag. From January 1st to September 1st, 2003, the mine produced 214 400 t of ore grading 3.72% Cu, 1.76% Zn, 2.16 g/t Au and 9.81 g/t Ag. Production for the remainder of 2003 is estimated at 71 000 t of ore.

McIlvenna Bay Deposit
Cameco Corporation (76.1%) and Billiton Resources Canada Inc. (32.9%)

There was no work at McIlvenna Bay in 2003. Foran Mining returned the McIlvenna Bay Project to Cameco and BHP Billiton Inc. in 2002. The deposit is within Paleoproterozoic volcanic rocks which are the southern extension of the Flin Flon Domain, buried below a cover of Phanerozoic sedimentary rocks (map on back page).

McIlvenna Bay is a VMS deposit hosted by altered felsic metavolcanics, consisting of one main lens (Lens 2) and four smaller lenses (Lens 3, Lens 4, Upper West Zone and Copper Stringer Zone). The stratabound deposits strike NNW, dip 60° to 75° northeast and plunge moderately to the northwest. Total combined indicated and inferred resources for the Lens 2 massive sulphide, the Upper West zone and the Lens 3 massive sulphide were increased by 26% in 2000 and are now estimated to be 14.5 M t grading 6.08% Zn, 0.91% Cu, 0.40% Pb, 0.45 g/t Au and 23.70 g/t Ag.

6.2 Exploration

Overview

Limited exploration of VMS targets in the Flin Flon Domain continued in 2003. Outside of the Flin Flon Domain, there was renewed exploration of the historic, sediment-hosted Janice Lake copper showings in the Wollaston Domain by Phelps Dodge Corporation of Canada Ltd., and Leader Mining International Inc. is re-evaluating the Knife Lake copper deposit in the Glennie Domain and has plans for a 2003/2004 winter drill program.

Flin Flon Domain; Cu-Zn VMS Deposits

Mine-area exploration by Hudson Bay Exploration and Development Company Limited (HBED) in 2003 included the completion of four diamond drill holes totaling 2543.5 m to on the felsic Myo Lake rhyolite. HBED was also active in the Matheson Lake area completing nine drill holes totaling 1957 m to test SPECTREM targets and two drill holes totaling 1066 m to test the Fon zinc zone. HBED also completed two drill holes totaling 847 m around the Konuto Lake Mine, and two drill holes totaling 644 m on the Suggi Lake target in the southern extension of the Flin Flon Block, under the cover of Lower Paleozoic sedimentary strata.

Midway through 2003, Aur Resources Ltd., a major player in VMS exploration of the Flin Flon Domain for the past decade, completed a *letter of intent* agreement with Foran Mining whereby Foran may acquire all of Aur's properties in Saskatchewan and Manitoba.

Leader Mining International Inc. announced on Nov. 3rd that a feasibility study was being completed on its Paleoproterozoic, metavolcanic-hosted and polymetallic Knife Lake Deposit located in the northern part of the Glennie Domain. Leader has plans for a winter geological drill program on the property.

Wollaston Domain: Sediment-Hosted Deposits

Phelps Dodge Corporation of Canada staked 3 claims totaling 16 612 ha in 2002 to cover the historic sediment-hosted copper showings around Janice Lake in the southeastern part of the Wollaston Domain. A surface program to refine and test established targets was completed this summer. Previously flown airborne magnetic data was obtained and reviewed, prospecting and limited soil geochemistry was done, ground-based magnetics and IP surveys followed, and 6 diamond drill holes totaling 850 m were completed.

Rottenstone Domain: Copper-Nickel Sulphide Deposits

Exploration of the Rottenstone copper-nickel deposit in central Rottenstone Domain continued in 2003. The deposit consists of dense, net-textured, disseminated, and rare massive Ni-Cu sulphides enriched with platinum group metals. It is hosted within a harzburgite-orthopyroxenite sill which crosscuts a pelitic migmatite unit. The mine produced 26 057 t of ore, which averaged 3.28% Ni, 1.83% Cu, and 9.63 g/t PGM + Au. The PGM grades are exceptionally high; four channel samples obtained from mine tailings contain an average of 2.54 g/t PGM and Au.

Uravan began compiling all technical data on the Rottenstone property in 1998, and spent a total of about $1.3 M prior to 2002. The project focused on the immediate mine area. A tree-top biogeochemical survey conducted over the northern third of the property provided a regional multi-element database. Integration of geochemical data with detailed structural maps outlines three northwest-trending (325°) multi-element, stacked anomalies coincident with major faults which trend northwest and north-northwest.

Reconnaissance drill programs carried out by Uravan prior to 2002 amounted to 4118 m in 23 holes. Five additional ultramafic sills away from the main Rottenstone deposit were intersected. Select intervals contain between 500 and 1466 ppm of the pathfinder Cr, and between 200 and 489 ppm nickel. New gravity and EM surveys were completed in mid 2002, followed-up by 6 diamond drill holes which tested Zone 1, Zone 2, and Bulls Eye targets. Further detailed IP and gravity surveys were completed in December of 2002 which delineated three shallow anomalies within 600 m of the main Rottenstone deposit. A follow-up winter drill program was planned for 2003.

7.0 PLATINUM GROUP METALS

Platinum group metals (PGM's) attracted little attention in 2003. There was no active exploration in the Peter Lake Domain. A total of 59 claims covering some 94,616 ha lapsed during the 12 months ending Sept. 30, 2003. Current land under disposition comprises 14 claims within three small claim groups which total 36,055 ha. Twelve of the 14 claims were recorded since Dec. 18, 2002. Golconda Resources Ltd., HML Managed Inc. and Lyncorp International Ltd. were the principal land holders after a rush of staking activity in 2000 in response to a successful reconnaissance lithogeochemistry program conducted by Golconda in 1999.

8.0 RARE EARTHS

Great Western Minerals Group Ltd., 100%

Metallurgical testing continued in 2003 at the Hoidas Lake Property in the Ena Domain in northwestern-most Saskatchewan. The 6 389 ha property is located 56 km northeast of Uranium City and covers the main part of a belt of 26 showings along a 10 km long fault system. Host rocks are mainly Archean granite and tonalite gneiss, and migmatite. The belt is less than 10 km west of the regional-scale, northeast-trending Black Bay Fault; mylonite is common on the property. Northeasterly trending diabase dykes are also common in the region.

Recent work at Hoidas Lake has revealed that rare-earth elements are contained in apatite, lesser allanite and minor monazite which fill three parallel to sub-parallel shears in a zone up to 40 m wide. The JAK Zone is the main target and is open; it has a composite vein width of 3.2 m and drill tested along 475 m of strike and to a depth of 65 m. Light rare earth elements are predominant, including cerium, lanthanum, neodymium and praseodymium with lesser samarium. Total rare earth oxide contents range between 4.2% and 5.28%. The zone is estimated to contain 1.03 M t of ore. Metallurgical studies have determined that cold acid leach direct-extraction will achieve a 98.6% recovery rate for rare earth oxides. Tests also indicated that processing by low cost non-toxic leaching and ion exchange would offer flexibility to rapidly respond to changing market conditions by recovering the specific elements in demand.

Great Western plans to complete in-fill drilling on the Jak Zone in 2004 to improve resource calculations. Further sampling of the JAK Zone was completed this year in order to provide more material for final metallurgical test work. This work will also lead to the design of a pilot plant to be constructed on or near the JAK Zone in 2004.

9.0 TANTALUM

There was limited exploration for rare metals in 2003. The Bright Lake Property has been the highest profile rare metal project for the past three years, and on Nov. 3rd, owner Leader Mining International announced plans for a geological drill program at Bright Lake during the 2003-2004 winter season.

In January 2001, Leader Mining International Inc. acquired 61,000 ha in the Bright Lake area located some 70 km north-northwest of Stony Rapids, in the Dodge Domain. The property contains numerous pegmatites and related aplitic granite bodies and covers a cluster of coincident lake sediment geochemical anomalies of tantalum-cesium-rubidium. Some of the rocks contain significant tantalum mineralization with the potential to host a deposit. Grab samples of pegmatite near Marchant Lake contained values up to 276 ppm Ta_2O_5, 695 ppm Sn, 528 ppm Li, 5500 ppm Rb, and 238 ppm Cs.

Rock, stream sediment, and lake sediment samples were collected in 2001 regional reconnaissance programs and four specific areas with elevated Ta

values were identified. Concentrations up to 337 ppm Ta_2O_5 and 5500 ppm Rb were measured in pegmatites. The geological setting is comparable to the Greenbushes deposit, Australia, where tantalum in mined from pegmatites averaging 230 ppm Ta_2O_5. The 2002 summer field program was designed to identify future drill targets by completing a detailed geological mapping and sampling program over the mineralized outcrops. Lithogeochemical sampling revealed values up to 586 ppm Ta_2O_5 and 3470 ppm Rb.

10.0 DIAMONDS: FORT À LA CORNE

10.1 Overview

Diamond exploration in the Fort à la Corne District located northeast of Prince Albert in central Saskatchewan was robust in 2003 . On October 1, more than 50 companies and individuals held a total of 648,000 ha. Total expenditures are forecast at $12.7 M, up significantly from the actual total expenditure in 2002 of $6.0 M (Figure 1). Advanced programs include a major follow-up diamond drill program on numerous kimberlites on the Fort a la Corn Joint Venture property, and underground bulk sampling of the Star Kimberlite. Also, the first kimberlite discovery in the district since 1996 was made on the East Side Diamond Property by Forest Gate Resources.

10.2 Star Kimberlite Project

Shore Gold Inc., 100%

Shaft sinking on the Star Kimberlite began in 2003 in order to obtain a 25,000 t bulk sample (Figure 7). The estimated budget for the program is between $ 6-7.5 M, depending upon the amount of kimberlite processed

The Star Kimberlite is at the southeast end of the Fort à la Corne kimberlite field. It consists of diatreme and pyroclastic crater facies rocks covering an area of 4 km^2 and ranging from 3.0 m to more than 540 m thick. Preliminary estimates of contiruous diamond-bearing kimberlite are approximately 500 M t with an average thickness of 88 m, are based on a minimum cut-off thickness of 30 m.

In December of 2002, Shore Gold received necessary approvals to initiate the bulk sampling program. The program is designed to recover a parcel of at least 3,000 carats of diamonds to enable an accurate valuation of stones. It involves the sinking of a 4.5 m diameter vertical shaft and drifting in kimberlite to recover up to 25,000 t of kimberlite. The kimberlite recovered from the Star body will be processed on-site in a modular treatment plant with a capacity of 10 t/hr.

The location for the bulk sample was selected after a review of the microdiamond data from all previously completed holes. The location is representative of the body as a whole, although it is recognized that the Star kimberlite has the potential to host higher-grade zones. An HQ core hole was drilled in the centre of the proposed shaft location to a depth of 348 m. It will serve as the shaft pilot hole, and will provide information for planning drifting and bulk sampling.

In order to ensure stable ground conditions as sinking proceeds through the overburden, 22 freeze holes were drilled to a depth of 130 m in a circular pattern surrounding the collar. Two additional outlying holes monitor ground temperature. Once the shaft collar had been constructed, the freeze plants were tied-in and the initial pre-sink occurred. The pre-sink phase, with all mucking and hoisting achieved with a temporary clam stand and a crane to a depth of 60 m, was completed in mid-July. The installation of the headframe, hoists, suspension of the Galloway stage and Cryderman mucker, followed, and the remainder of the required infrastructure (workshops, storage areas etc.) was completed during establishment of the freeze wall.

Shaft sinking is being done by drilling and blasting six foot benches. At 89 m, the shaft reached the transition from glacial till to Cretaceous sediments. The sediment-kimberlite transition was reached at 107 m. By the end of November 2003, the shaft was approximately 150 m deep. All kimberlite material is being stockpiled in a fenced, secure location.

Figure 7: Newly constructed headframe at the Star Kimberlite. The shaft reached kimberlite in October, some 110 m below surface. Planned depth is approximately 250 m.

The modular diamond recovery plant has been assembled and is being commissioned. The plant components include a Dense Media Separator (DMS), x-ray sortex and a grease table to produce a diamond-rich concentrate that will be sorted in a secure facility.

10.3 Fort À La Corne Joint Venture (FalC)

De Beers Canada Exploration Inc., operator (42.25%), Kensington Resources Ltd. (42.25%), Cameco Corporation (5.5%), and UEM Inc. (carried 10%).

In the first half of 2003, the Fort à la Corne Joint Venture reported results from 2000-2001 and 2002 drill programs, and in the fourth quarter completed a major follow-up diamond drill program on numerous kimberlites.

The joint venture has a property holding which contains 63 kimberlite bodies that constitute one of the largest kimberlite fields in the world. The bodies range from 2.7 to 250 ha in size based on geophysical modeling. The kimberlite bodies are commonly composite in nature and made up of multiple eruptive phases of mainly of pyroclastic crater-facies deposits. Exploration activity over the past few years has focused on a few of the higher priority kimberlites, including most recently the 140/141 kimberlite.

In January of 2003, interpretive grade estimates and modeled value results for the 2001 large diameter drilling program on the 140/141 kimberlites were reported. A total of 769 tonnes of kimberlite was excavated and from this, 431 macrodiamonds (>1.5 mm in size) weighing 42.455 carats were recovered and added to the existing kimberlite 140/141 inventory of 248 stones weighing 21.22 carats.

Table 5 shows sample grades for the 11 large-diameter boreholes (610 mm; 24-inch) drilled in 2000 and 2001. Grades are up to 41.5 carats per 100 tonnes (cpht) and cumulatively average 5.5 cpht. Notably, the highest calculated sample grade includes a 3.335 carat stone recovered from a 2001 sample. Grade estimates derived from statistical modeling of diamond size distributions for kimberlite 140/141 ranged from 5 to 12 cpht. These estimates are extrapolations for stones >n 1.5 mm in size and pertain only to the central portion of kimberlite 141 where testing was conducted during 2000 and 2001.

Actual average parcel diamond values for the 2001 stones were posted at $US52.60/carat, reflecting a substantial increase from US$33.67/carat for the 2000 stones. The single largest stone measures 3.335 carats. It was recovered from large diameter drill hole 141-20 and is valued between US$390 – $450 per carat. Modeled macrodiamond values, which take into account the expected diamond size distribution from any potential, future production scenario, ranged from US$20 to 220/carat. In light of the difference between modeled parcel and actual values, De Beers suggests that for small diamond samples, the actual parcel value is highly variable and the actual dollar per carat value for a potential producer is usually understated.

De Beers reported a preliminary range of revenue values from US$1 to 26/tonne, based on modeled values and grade estimates for the modeled size distributions. Confidence limits of 80% for the modeled values and preliminary assessment of revenue are reported to reflect variability in diamond size distribution and diamond value, and not of grade.

Table 5: Results from mini-bulk samples from 2000 and 2001 drill holes in the 141 kimberlite.

Drill Hole	Year	Mini-bulk Sample Grade (cpht)	Borehole Sample Grade (cpht)	Num. of Kim-berlite Phases*
141-20	2001	0 - 41.5	6.6	3
141-21	2001	0 - 16.1	6.4	4
141-22	2001	0 - 17.7	7.2	2
141-23	2001	0 - 11.4	5.5	2
141-24	2001	0 - 21.3	5.2	3
141-25	2001	0 - 9.7	2.7	2
141-26	2001	0 - 17.2	5.5	at least 2
141-27	2001	0 - 6.9	2.1	2
141-28	2001	0 - 13.9	4.2	3
141-04	2000	0 - 34.3	8.4	4
141-05	2000	0 - 19.7	7.1	4

* preliminary estimate, 2003

Table 6: Summary of 2002 macrodiamond (>1.5mm) recoveries from kimberlites 140 and141, sorted by drill hole and dominant kimberlite type.

Drillhole	Dominant kimberlite	Excavated Mass	Total carats	Drillhole Grade (cpht)	Total stones (>1.5mm)	Stones/ tonne	# of stones >0.25ct	Largest stone
141-30	141 MGB	233.825	14.735	6.302	154	.659	8	.355
141-31	141 MGB	241.395	16.620	6.885	153	.634	10	.86
141-32	141 MGB	253.781	16.885	6.653	143	.563	12	1.045
141-33	central	176.489	16.525	9.363	43	.244	7	10.23
140-29	S. breccia	84.872	14.45	17.026	72	.848	9	2.59
140-30	S. breccia	100.103	9.500	9.490	55	.549	5	3.61
140-28	140 MGB	72.163	1.220	1.691	15	.208	0	
140-31	140 MGB	109.245	3.125	2.861	29	.265	2	.515
TOTAL		1,271.873	93.060		664		53	

141 MGB: 141 Mega-graded bed; central: Younger 140/141 vent; S. breccia: South breccia beds
140 MGB: 140 vent, Mega-graded bed

Based on the results from 2000 and 2001, a $5.2 M drill program was conducted in 2002, focused on the 140/141 kimberlite body. The program consisted of 25 core holes, and 8 large diameter (three 91 cm and five 61 cm) reverse circulation boreholes. The three 91cm (36-inch) drill holes were targeted on the northwestern eruptive centre and were all spotted within 15 m of a centrally located NQ core hole (141-29). Subsequent to core hole drilling, five favourable locations were chosen from the sparsely tested central and southeastern portions of the 140/141 body. Additional 2002 work included initial ore dressing studies on the 140/141 kimberlite and a conceptual modeling exercise (similar to a scoping study, but less specific) that will provide thresholds for several preliminary mining options based on varying factors such as size, depth, thickness, grade and value. The purpose of this study was to provide the joint venture partners with a reference point for the revenue models currently being produced by De Beers

Diamond recovery results from the 2002 program were released by the joint venture in June 2003. The discovery of a 10.23 carat dodecahedral aggregate stone with two dimensions of 14 and 10.5 mm was announced. Also included in the 2002 mini-bulk sampling results were the recovery of an additional 663 macrodiamonds with a minimum cut-off of 1.5 mm. The diamonds collectively weighed 93.06 carats and were sampled from 1,272 tonnes of kimberlite for an average grade of 7.32 cpht. In order to better understand the diamond distribution within the kimberlite, the diamond recoveries were grouped based on dominant kimberlite type (Table 6). From this, it was surmised that the greatest potential for higher grades appeared to be in the southern breccia beds, thick beds of coarser-grained xenolithic kimberlite breccia in the south and central parts of the body. A total of 127 macrodiamonds were recovered from this unit and included stones weighing 3.61, 2.57, 2.59, 1.82 and 1.16 carats. An average grade for the two holes dominated by this unit was 12.9 cpht.

The final results of the 2002 program were released in October of 2003. This included the verification of a significantly higher-grade zone known as the kimberlite breccia unit. This unit had the best diamond recovery and has an estimated grade forecast of 15 cpht (Table 7). Results also included updated modeled grades and revenues for distinct units in the 140/141 kimberlite body. Grade forecasts vary from 5 to 15 cpht, while revenue estimates vary from $US67 to $97/carat. Further work is required to increase confidence levels in grade and revenue forecasts for the 140/141 kimberlite because it has since been divided into numerous geological units.

In the final quarter of 2003, a two phase exploration program was initiated. Phase I had an estimated cost of $3 M and was complete by November. It included up to 45 diamond drill holes on priority kimberlites 140/141, 150, 148 and 122. This additional drilling

Table 7: Results for the 140/141 kimberlite based on 2001 and 2002 drill programs.

Geological Unit	Tonnes of Kimberlite	Stone Counts		Carats		Actual Grade (cpht) (>1.5mm)	Modeled Grade (>1.5mm)	Modeled Revenue $US/ct
		Micro-diamond	Macro-diamond	Total	>1.5 mm			
MGB Coarse	1,048.90	311	888	95.8	88.6	8.4	12	97
MGB Fine	371.1	226	86	10.9	10	2.7	7	71
MGB- Repeated	254.9	180	155	13.6	12.7	5.0	8	75
Fine Kimberlite (vent)	176.5	171	43	16.5	16.5	9.3	5	93
Speckled Kimberlite	93.9	126	45	4.6	4.3	4.5	9	67
Kimberlite Breccia	74	183	67	14.3	13.7	18.6	15	97

on the 140/141 body focused on the relatively higher grade zone discovered in the 2002 drilling. The Phase I program also included an airborne magnetic gradiometry survey over the entire property. Phase II, scheduled for spring and summer of 2004, will include the drilling of large diameter drill holes into targets based on the Phase I core hole drilling.

10.4 Candle Lake Project
Great Western Diamond Corp., operator (80%), War Eagle Mining Co Inc. (20%)

The 22,663 ha Candle Lake Joint Venture property is north of the main Fort à la Corne trend. It covers two large diamondiferous kimberlites: the southerly C28 kimberlite, and the C29/30 kimberlite 30 km to the north. The kimberlites have a combined estimated mass of 78 M t. Previous NQ drilling resulted in the recovery of 75 macrodiamonds (one dimension > 0.5 mm) and 464 microdiamonds from 3.84 t of core samples. Although grade estimates are highly variable, projected grades as high as 27 cpht have been reported in CL95-01 and 21 cpht in CL95-06 from the C29/30 kimberlite. Some of the best results to date are from WSL-10, an HQ drill hole in the C29/30 kimberlite, which intersected 107 m of kimberlite and returned 126 diamonds, including 5 macrodiamonds (one dimension > 0.5 mm) from 170 kg of material. Overall grade estimates for C29/30 average 11 cpht, and at the current stage of exploration, results are comparable in terms of macrodiamond frequency and projected grade with results reported from similar exploration stages on other kimberlite bodies in the district.

In September of 2003, Great Western Minerals Group announced that the wholly-owned subsidiary Great Western Diamonds Corp. ("GWD") had been activated in order to take over all diamond-related activities. All of the company's diamond properties will be transferred to the subsidiary.

10.5 East Side Diamond Property
Forest Gate Resources Inc. (85%,), and Leader Mining International Inc. (15%).

The property is adjacent to the east side of the Fort à la Corne (FalC) joint venture property, and to the north side of Shore Gold property. Examination and reprocessing of old aeromagnetic data was followed by a ground magnetic survey in April, 2003, which delineated a 250m-wide anomaly 2.5 km east of the FalC 121 kimberlite. NQ drilling in June intersected 23 m of kimberlite (**Dizzy Kimberlite**) before the hole was lost in kimberlite. This is the first new kimberlite discovery in the district since 1996. A second hole was attempted but was lost in overburden at 72 m. A very small sample set (3 sets at 8 kg each) was processed for diamond recovery, but no diamonds were found. A gravity survey was carried out in August to estimate the size and shape of the Dizzy kimberlite and to identify new targets. The kimberlite is interpreted to be up to 100 m thick with a footprint of about 5 hectares.

Further reprocessing of detailed aeromagnetic data identified a second anomaly measuring 600m in the north-south direction and 400m in the east-west direction (footprint area of about 19 ha) on the southern border of the property. The anomaly is a weak magnetic high that was tested by ground magnetics and gravity in August of 2003.

An aeromagnetic survey was flown over the entire East Side property in order to identify any other possible targets. The joint venture has developed

plans to drill 5 holes in the Dizzy kimberlite and possibly 1 hole in the new target to the south in 2004.

10.6 Other Companies

United Carina Resources Corp., Consolidated Pine Channel Gold Corp., and Shane Resources have entered into an agreement with Casavant Mining Kimberlite International (CMKI) whereby the three companies have the right to acquire an undivided 10% interest each in 82 prospective claims held by CMKI. In addition, CMKI has the first right of refusal to acquire up to a 49% interest in any diamond exploration property held by the former companies.

11.0 INDUSTRIAL MINERALS

11.1 Overview

Industrial minerals are an important component of the non-renewable resource sector in Saskatchewan (Figure 2). They have consistently accounted for between 20 and 50% of the gross value of provincial mineral production during the past 30 years. Not including coal, the four major products are potash, salt, sodium sulfate and aggregate, with minor production in structural clay, clinker, a naturally fired brick made from mudstone, and bentonite. Potash production in 2002 from ten underground operations, including 2 solution mines, was 12.9 M t valued at $1.7 B. The total value of industrial mineral production for the year was $1.8 B (Figure 8).

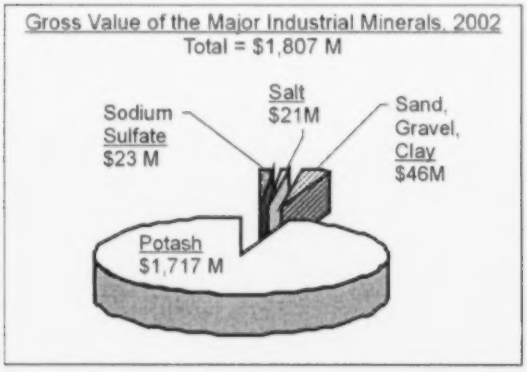

Gross Value of the Major Industrial Minerals, 2002
Total = $1,807 M
Sodium Sulfate $23 M
Salt $21M
Sand, Gravel, Clay $46M
Potash $1,717 M

Figure 8: Value of the major industrial minerals in 2002. Data from Mines Branch, Sask. Industry and Resources.

11.2 Silica Sand

Daren Industries Ltd., whose subsidiary Hanson Lake Sand Corp. produced silica sand in 2001 at Hanson Lake, was petitioned into bankruptcy in April 2002. The secured lenders retrieved title on the property and in turn optioned it to Winn Bay Sand. Winn Bay returned the property to production on a limited basis in the summer of 2003.

11.3 Kaolin

Whitemud Resources Inc. acquired quarrying leases over the Gollier Creek kaolin deposit, near Wood Mountain. Whitemud plans to construct a pilot plant to produce various grades of kaolin for western Canada markets.

12.0 ACKNOWLEDGEMENTS

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SASKATCHEWAN MINERAL PROPERTIES AVAILABLE FOR OPTION AND/OR JOINT VENTURE

Gold and Silver Properties

Name	Disposition Number	NTS Block & Domain	Commodity	Tonnage (t)	Grade	Assays	Mineralization Type	Contact
Amisk Lake	S- 99730	63L-9 Flin Flon	Au			Soil anomaly >1000 ppb Au	Shear zone with pyrite, arsenopyrite & native Au	Angell's Resources Ltd. Gerry Angell (306) 362-2112
Baranek Lake	S-106845 S-107067	73P-10 La Ronge	Au-Ni-Cu-(PGE)			100 g/t Au/ Grab 72 g/t Au/Grab 0.21 % Cu/Grab 0.22% Ni/Grab	Shear hosted quartz veins layered Mafic intrusive. Un-explained gold-in-till.	Dave Billard Ph: (306) 652-1865 E-mail: dbillard@sasktel.net
Bervin Lake	S-106656	73P-15 La Ronge	Au			0.349 oz/t Au/Grab 0.140 oz/t Au/Grab 0.11 oz/t Au/Grab	Dshear hosted quartz vein. Dis-seminated sulphides in felsic volcanics.	Dave Billard Ph: (306) 652-1865 E-mail: dbillard@sasktel.net
Compass Lake	S-101516	64D-05 La Ronge	Au			Extensive fan of gold grains in till being shed off an approx. one mile long section of Byers Fault, which is entirely under cover and has never been tested by diamond drilling.	shear-hosted gold	Coronation Mines Ltd. Scott Bending Ph: (604) 682-6229 Fax: (604) 682-6205
Devil's Lake	S- 101768 S- 100656	73P-10 La Ronge	Au			Best grade of 0.44 oz/ton over 2.0 m.	Alteration/Shears within quartz veins	ODAAT INC. Randy/Duane Studer (306)425-3350
Gem Extension	S-107094	73P-07	Au			9.49 g/t over 1 m	Sediment-hosted Au (argilite)	Knsto Gold Inc. Rod Spooner (306) 425-2828
Howard Lake	ML 5180	73P-05 La Ronge	Au-Ni-Cu-Co-Pt				Differentiated Mafic (norite) intrusion	Walter Shupe (306) 425-2182
Phantom Lake Property	CBS 3194	63K-12 Flin Flon	Au			Chip sample 93.0 g/t Au over 3.0 m	Shear-hosted quartz veining	Ray-Dor Resources Richard Murray (204) 687-4905
Tansi (Stanley Road)	S-106019	73P-7 La Ronge	Au			1st area assays up to 3.59 g/t Au. 2nd area up to 4.69 g/t Au	2 areas of sheared contorted from formation 1st area Po>Cp>Sl	Consolidated Pine Channel Gold Corp. Rick Walker (306)664-3828
Wapiyao Lake	S-106655 S-107066	73P-10 La Ronge	Au			51.7 g/t Au- 1.5 m Channel 63.4 g/t Au /Grab	Shear hosted quartz vein.	Dave Billard Ph: (306) 652-1865 E-mail: dbillard@sasktel.net
Wedge Lake	S-105628 S-105629	64D-4 La Ronge	Au	600 000	0.15 oz/ton Au	Drill hole: 0.415 oz/ton Au over 26.6 m & 0.298 oz/ton Au over 5.4 m	Stratabound gold mineralization and cross-cutting gold mineralized quartz veins	ODAAT INC. Randy/Duane Studer (306) 425-3350
Wildnest Property	CBS 3245	63M-1 Kisseynew	Au-Zn-Pb	660 000	3.5 g/t Au		Silicified shear zone in gneiss	Ray-Dor Resources Richard Murray (204) 687-4905

Nickel, Copper, Cobalt and Platinium Properties

Name	Disposition Number	NTS Block & Domain	Commodity	Tonnage (t)	Grade	Assays	Mineralization Type	Contact
Baranek Lake	S-106845 S-107067	73P-10 La Ronge	Au-Ni-Cu-(PGE)			100 g/t Au/ Grab 72 g/t Au/Grab 0.21 % Cu/Grab 0.22% Ni/Grab	Shear hosted quartz veins layered Mafic intrusive. Un-explained gold-in-till.	Dave Billard Ph: (306) 652-1865 E-mail: dbillard@sasktel.net
Howard Lake	ML 5180	73P-5 La Ronge	Ni-Cu-Co-Pt-Au			2.44% Ni, 0.49 % Cu & 0.09% Co over 20 ft. 250 ppb Pt	Differentiated mafic intrusion	Walter Shupe (306) 425-2182

SASKATCHEWAN MINERAL PROPERTIES AVAILABLE FOR OPTION AND/OR JOINT VENTURE

Base Metal Properties

Name	Disposition Number	NTS Block & Domain	Commodity	Tonnage (t)	Grade	Assays	Mineralization Type	Contact
Anglo-Rouyn	S-106194 S-106195 S-106196 S-106197	73P LaRonge	Cu-Au	2 000 000	2% Cu 0.035 o/t Au 0.07 oz/t Ag		Sediment-hosted	Kristo Gold Inc. Rod Spooner (306) 425-2828
Brabant/Peg/ McKenzie	ML 5054	64D-4 La Ronge	Zn-Cu-Pb	4 860 000	5.19% Zn 0.57% Cu 0.28% Pb 22.6 g/t Ag 0.22 g/t Au		Sediment-hosted stratiform base metal deposit	Boart Longyear Inc. Bob Fleming (705) 672-3311
Complusion River	S-101745 S-101747 S-101748 S-104828	64E-12 Wollaston	Pb-Zn			Over 45 m anomalous Zn in several drill holes. A 0.5 X 7 km till geochem anomaly	Sedex	Far West Mining Ltd. Pat Varas (604) 602-9144
Dianne Lake	S-106116	74N-10-NW Black Bay close to its contact with Zemlak	Cu Minor Ag			53% of samples taken assaysed >0.5% Cu. Assays reached 9.3% Cu. Ag generally <1 oz/ton	Chalcopyrite and bornite in quartzo-feldspathic biotitic gneisses	Consolidated Pine Channel Gold Corp. (306) 664-3828
Ennis Lake	S-106295 S-106299	73I-11 Glennie	Fe	> 100 million	35% - 50% Fe	For REE, Au, and 27 elements. Special assay for Fe are available on request.	Banded iron formation of "Lake Superior Type"	Golconda Resources Ltd. Ph: (403) 232-6828 Fax: (403) 232-8650
Foster River	S-106663 S-106664 S-106665	74A/04&05 Wollaston	Zn-Pb	50 000	4.5% Zn	Drill hole - 7.6% Zn/8.4 m 1.93% Zn/39.9 m 5.60% Zn/5.8 m 2.84 % Zn/17 m ,2.54%Zn/16 m	Sediment-hosted base metal deposit	Arc Metals Ed Sawitzky (204) 687-8141
Pillow Lake	S- 106804	64D-05 La Ronge	Au-Cu	lens 7.5 m wide x 26 m long x 90 m deep	1.47% Cu .02 oz/ton Au		Showing hosted by a shear formed by a 30 m -60 m wide laterally extensive quartz-sericite-biotite schist	ODAAT INC. Duane/Randy Studer Ph: (306) 425-3711 Fax (306) 425-2535

Platinium Group Element Properties

Name	Disposition Number	NTS Block & Domain	Commodity	Tonnage (t)	Grade	Assays	Mineralization Type	Contact
Olmac	S-106240		Pt-Pd			Boulder Occurrence, 325 ppb Pt, 217 ppb Pd	Magmatic (clinopyroxenite)	Reindeer Syndicate Rob Dunick/Rod Spooner (306) 425-2828

Uranium Properties

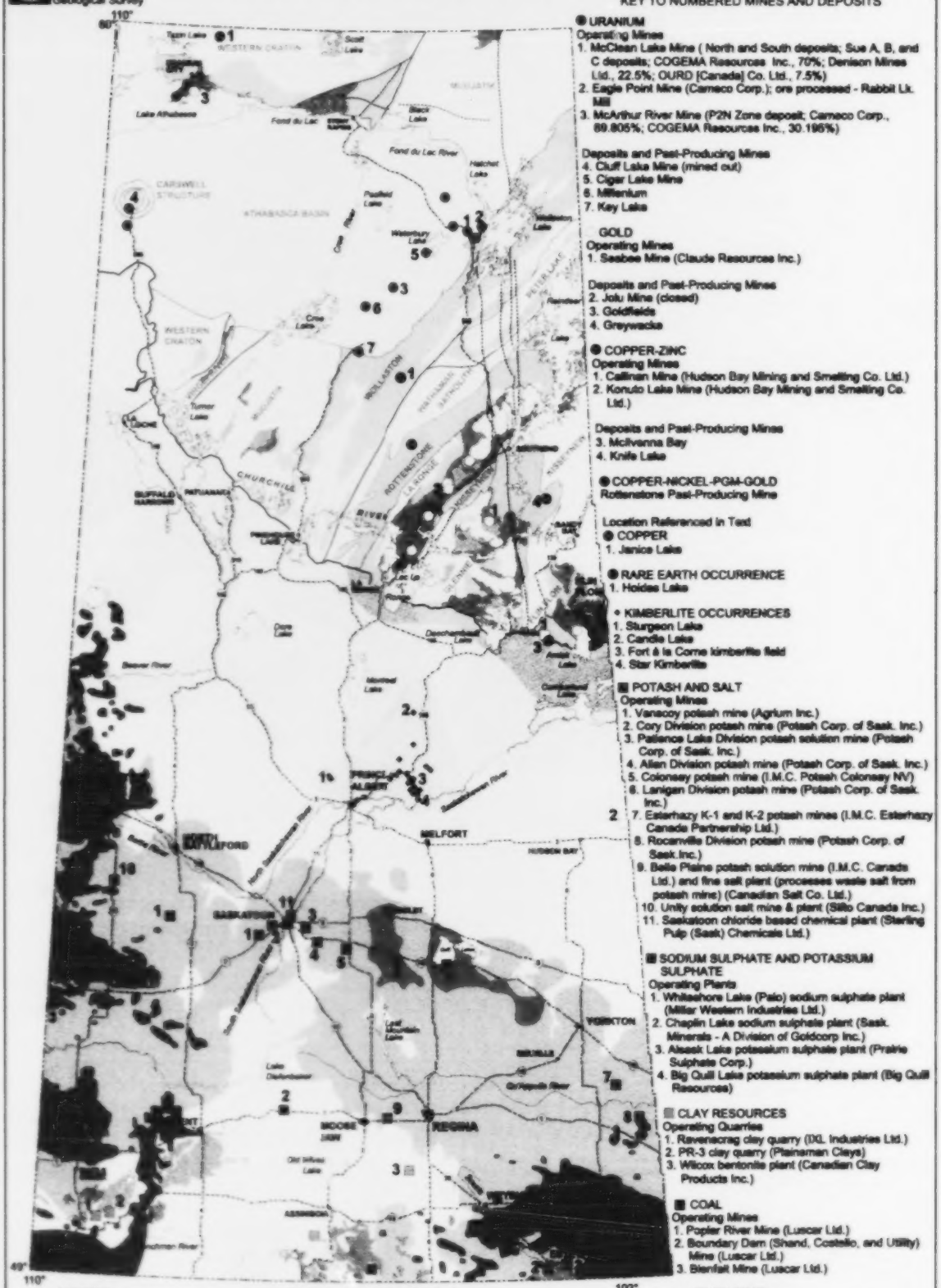
Name	Disposition Number	NTS Block & Domain	Commodity	Tonnage (t)	Grade	Assays	Mineralization Type	Contact
Diabase Peninsula	S-106843	74G-07	U			Geochemically altered sand-stone boulders extend 1.5 km NE beyond most northerly line of electromagnetic surveying	Unconformity-type deposit along Cable Bay Shear Zone (CBSZ) between Mudjatik and Virgin River Domains.	Lloyd Clark Ph: (604) 533-0022 Fax: (604) 533-0008

Diamond Properties

Name	Disposition Number	NTS Block & Domain	Commodity	Tonnage (t)	Grade	Assays	Mineralization Type	Contact
BBX-PAE	S-135510 to S-135519	73H	Diamond				Pending	B & B Mining Brian Hrischuk (306) 922-4337
BBX-PAW	S-135520 to S-135523	73H	Diamond				Pending	B & B Mining Brian Hrischuk (306) 922-4337
Candle N	S-135702 to S-135704	73H-14	Diamond				Magnetic high on Ft. a la Corne trend	Lori McClenahan Ph: (604) 669-4677 Fax: (604) 669-9626
McKee Bay	S-106789	73I-05	Diamond				Magnetic high with coincident topo lows (ponds). Kimberlite target, on-trend to NW of Fort a la Corne	Gary Dunn Ph: (306) 425-5778 E-mail gde@mail.cableronge.sk.ca
Montreal	Approximately 11 Claims	73I	Diamond				Magnetic high on Ft. a la Corne trend	Lori McClenahan Ph: (604) 669-4677 Fax: (604) 669-9626
UCA-KPC	Approximately 250 claims	73H	Diamond			Pending	Magmatique (kimberlite)	United Canna Res. Corp. Rick Walker (306)664-3828

Saskatchewan Industry and Resources
Saskatchewan Geological Survey

MINERAL RESOURCE MAP OF SASKATCHEWAN



KEY TO NUMBERED MINES AND DEPOSITS

● URANIUM

Operating Mines
1. McClean Lake Mine (North and South deposits; Sue A, B, and C deposits; COGEMA Resources Inc., 70%; Denison Mines Ltd., 22.5%; OURD [Canada] Co. Ltd., 7.5%)
2. Eagle Point Mine (Cameco Corp.); ore processed - Rabbit Lk. Mill
3. McArthur River Mine (P2N Zone deposit; Cameco Corp., 69.805%; COGEMA Resources Inc., 30.195%)

Deposits and Past-Producing Mines
4. Cluff Lake Mine (mined out)
5. Cigar Lake Mine
6. Millenium
7. Key Lake

GOLD
Operating Mines
1. Seabee Mine (Claude Resources Inc.)

Deposits and Past-Producing Mines
2. Jolu Mine (closed)
3. Goldfields
4. Greywacke

● COPPER-ZINC

Operating Mines
1. Callinan Mine (Hudson Bay Mining and Smelting Co. Ltd.)
2. Konuto Lake Mine (Hudson Bay Mining and Smelting Co. Ltd.)

Deposits and Past-Producing Mines
3. McIlvanna Bay
4. Knife Lake

● COPPER-NICKEL-PGM-GOLD

Rottenstone Past-Producing Mine

Location Referenced in Text

● COPPER
1. Janice Lake

● RARE EARTH OCCURRENCE
1. Hoidas Lake

◆ KIMBERLITE OCCURRENCES
1. Sturgeon Lake
2. Candle Lake
3. Fort à la Corne kimberlite field
4. Star Kimberlite

■ POTASH AND SALT

Operating Mines
1. Vanscoy potash mine (Agrium Inc.)
2. Cory Division potash mine (Potash Corp. of Sask. Inc.)
3. Patience Lake Division potash solution mine (Potash Corp. of Sask. Inc.)
4. Allan Division potash mine (Potash Corp. of Sask. Inc.)
5. Colonsay potash mine (I.M.C. Potash Colonsay NV)
6. Lanigan Division potash mine (Potash Corp. of Sask. Inc.)
7. Esterhazy K-1 and K-2 potash mines (I.M.C. Esterhazy Canada Partnership Ltd.)
8. Rocanville Division potash mine (Potash Corp. of Sask.Inc.)
9. Belle Plaine potash solution mine (I.M.C. Canada Ltd.) and fine salt plant (processes waste salt from potash mine) (Canadian Salt Co. Ltd.)
10. Unity solution salt mine & plant (Sifto Canada Inc.)
11. Saskatoon chloride based chemical plant (Sterling Pulp (Sask) Chemicals Ltd.)

■ SODIUM SULPHATE AND POTASSIUM SULPHATE

Operating Plants
1. Whitesshore Lake (Palo) sodium sulphate plant (Miller Western Industries Ltd.)
2. Chaplin Lake sodium sulphate plant (Sask. Minerals - A Division of Goldcorp Inc.)
3. Alsask Lake potassium sulphate plant (Prairie Sulphate Corp.)
4. Big Quill Lake potassium sulphate plant (Big Quill Resources)

■ CLAY RESOURCES

Operating Quarries
1. Ravenscrag clay quarry (IXL Industries Ltd.)
2. PR-3 clay quarry (Plainsman Clays)
3. Wilcox bentonite plant (Canadian Clay Products Inc.)

■ COAL

Operating Mines
1. Poplar River Mine (Luscar Ltd.)
2. Boundary Dam (Shand, Costello, and Utility) Mine (Luscar Ltd.)
3. Bienfait Mine (Luscar Ltd.)

SILICA SAND

Operating Mines
1. Hanson Lake silica sand deposit (Winn Bay Sand)
2. Red Deer River sand deposit (Red Deer Silica)

LEGEND
- Uranium potential
- Base metal potential
- Gold potential
- Diamond potential
- Oil fields
- Gas fields
- Coal fields
- Potash and salt resource areas

SYMBOLS
- Edge of Precambrian Shield
- Precambrian domain boundaries and names
- Major bounding shear zones
- Major faults

SCALE

Saskatchewan Industry and Resources
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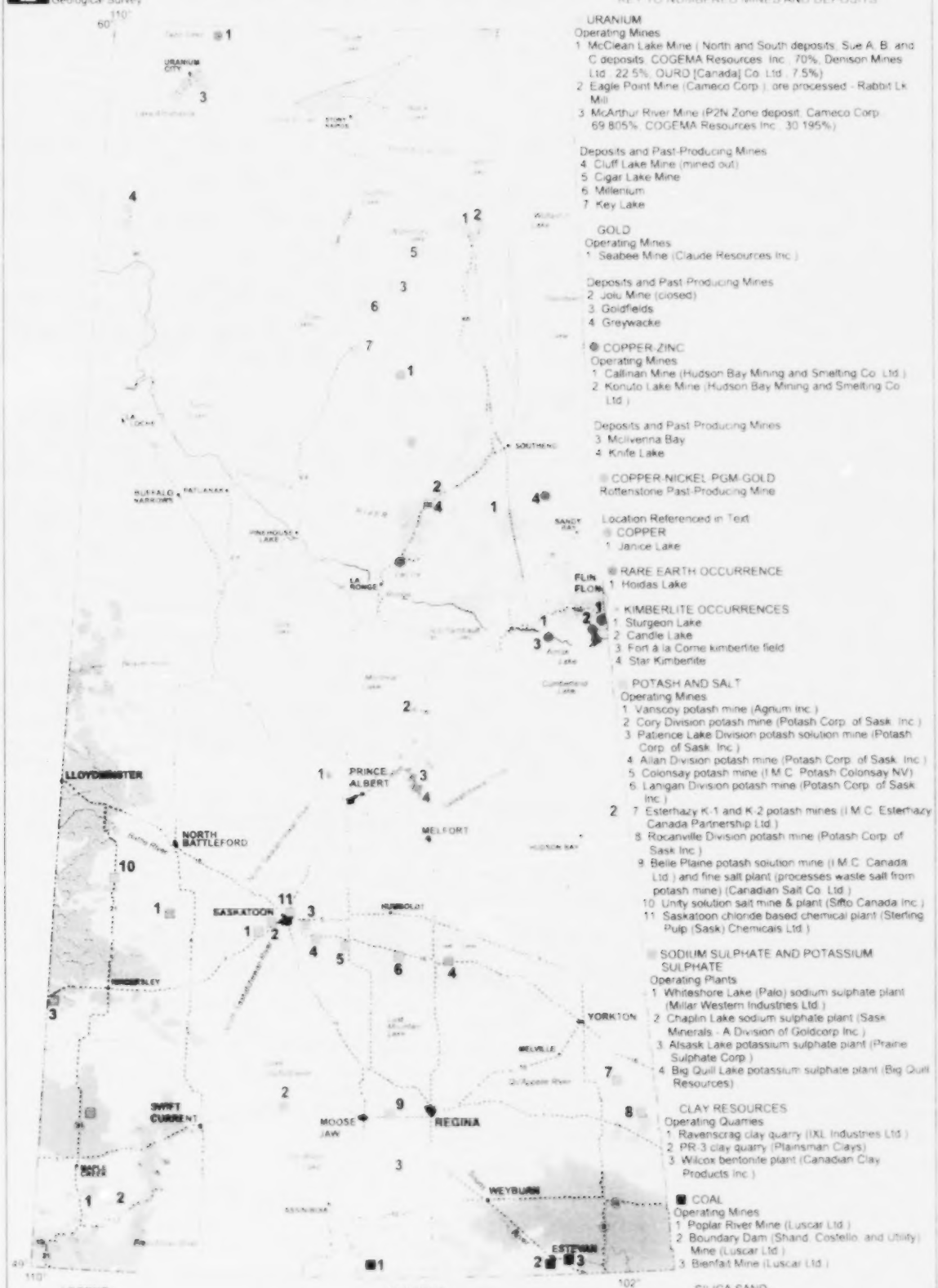
MINERAL RESOURCE MAP OF SASKATCHEWAN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PRINCE ALBERT
NORTH BATTLEFORD
MELFORT
SASKATOON
HUMBOLDT
YORKTON
MELVILLE
SWIFT CURRENT
MOOSE JAW
REGINA
WEYBURN
ESTEVAN
LA RONGE
FLIN FLON
SANDY BAY
SOUTHEND
BUFFALO NARROWS
PINEHOUSE LAKE
110°
60°
102°
49°